



**Orange Unified School District**

1401 N. Handy  
Orange, CA 92867

# **2011 - 2014 Technology Plan**

## **Board of Education**

Rick Ledesma	President
John H. Ortega	Vice President
Alexia L. Deligianni	Clerk
Kathryn A. Moffat	Board Member
Timothy Surridge	Board Member
Diane Singer	Board Member
Mark D. Wayland	Board Member

## **Superintendent**

Renae Dreier, Ed.D.

December, 2010

---



## Table of Contents

Introduction.....	3
Curriculum Goals and Objectives .....	5
Professional Development.....	24
Infrastructure .....	33
Budget.....	54
Monitoring and Evaluation.....	55
Adult Literacy .....	57
Effective Research-Based Methods.....	58
Appendices.....	63

# Technology Plan

# 2011-2014 Technology Plan

## Introduction

---

The Orange Unified School District (OUSD) presents this Technology Plan to define the vision for the future of technology in the district's forty schools. OUSD's vision is designed to encourage action that establishes and sustains learning environments conducive to powerful uses of technology and results in improved student achievement of state and local curriculum standards. The 30,742 students who learn in OUSD classrooms today must master not only basic skills, but also digital literacy and the ability to apply critical thinking skills in learning and in life to be successful citizens and contributing members of today's 21<sup>st</sup> century society.

The effective learning environments envisioned with this plan will meld traditional approaches with new models to support the learning of relevant content while still ensuring that individual student needs are met. The learning environments seen in the future will prepare OUSD students to *"learn effectively and live productively in an increasingly digital world,"* by meeting the following 2007 International Society of Technology in Education (ISTE) National Educational Technology Standards for Students:

- Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- Use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- Apply digital tools to gather, evaluate and use information.
- Use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources.
- Understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
- Demonstrate a sound understanding of technology concepts, systems and operations.

As stated by ISTE, a combination of essential conditions is required to create environments that use technology for powerful purposes. Therefore, this three-year technology plan, 2011-2014, has been conceived with the understanding that teachers, students, and parents must be provided with the necessary support, resources, and training for success:

- Vision with support and proactive leadership from the District
- A systemic plan aligned with the shared vision for student learning
- Consistent and adequate funding
- Robust and reliable access to current and emerging technologies and digital resources
- Educators skilled in the use of information and communication technology (ICT) appropriate for their job responsibilities
- Technology-related professional learning plans and opportunities for educators
- Consistent and reliable assistance for maintaining, renewing and using ICT and digital resources

- Continuous assessment, both of learning and for learning, and evaluation of the use of ICT and digital resources
- Partnerships and collaboration within the community to support and fund the use of ICT and digital resources
- Policies and initiatives at the national, regional and local levels to support schools in the effective implementation of technology”

National Educational Technology Standards for Students, 2007, ISTE

With these conditions in place, Orange Unified will continue to be a leader in utilizing technology to meet students’ needs. As a result, OUSD students will increase their academic achievement and become skilled users of technology in the new millennium.

## 1. Plan Duration

---

### **1. The plan should guide the district’s use of education technology for the next three to five years.**

This Technology Plan is based on a timeline from July 1, 2011 to June 30, 2014. This plan meets the California Department of Education requirements listed on the rubric on page 68, which also meets E-rate and EETT grant requirements.

## 2. Stakeholders

---

### **2. Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process**

The OUSD began the process of updating its state technology plan in August 2010, by initially reviewing the existing technology plan. Meetings were held with key stakeholders including school Instructional Technology Coaches, Administrators, Principals, Librarians, Library Media Technicians, and Parent Representatives for feedback and input. In addition, the Ed Tech Department convened with staff from departments of Information Services, Maintenance & Operations, and Facilities & Planning to identify future technology growth and integration needs.

School principals met with the Ed Tech Department to provide comments, suggestions, and recommendations regarding the technology plan. Information for the technology plan was also collected from Instructional Technology Coaches (ITC) and the online teachers. Educational Technology & Information Services staff provided feedback and direction in the evaluation and expansion of web-based services, staff development, and curriculum.

The involvement of Information Services, Support Operations and the Facilities & Planning Departments was critical to the development of an overall strategy for maintaining service levels within the demand for increased access throughout the OUSD network.

The above stakeholder groups are directly or indirectly involved in the implementation of the Technology Plan through both ongoing feedback and the review of annual progress.

### **3. Curriculum**

#### **3a. Description of teachers' and students' current access to technology tools both during the school day and outside of school hours**

OUSD is committed to giving teachers and students maximum technology access during the school day as well as after school with the limits of budgetary restraints. For teachers, the district's recommended technology standard is a laptop. As teacher workstations, these laptops have been an incentive to ensure that the district's professional staff has the tools to integrate technology successfully in support of the curriculum standards. Not only do teachers have current technology to use in the classroom, they can also use the equipment at home as an immediate benefit. Currently, all teachers at the five high schools, as well as many of the middle school and elementary school teachers use laptops. Additionally, almost every classroom in the District has at least one computer for teacher and student use.

New wireless networks with greater capacity are being installed at some schools where there are available funds. Teachers are using the wireless access to work in grade level/subject area groups to discuss student data and make data driven personalized instruction. Wireless access is also provided for students through the use of wireless laptop carts. An increasing number of wireless laptop carts are available to classes through signups at many of the OUSD schools. Schools with student laptop 1:1 programs also benefit from the wireless access.

Internet access is available in all classrooms, libraries and computer labs for staff and students. Schools have Internet access with a minimum of two T-1 lines at elementary schools, 10mbps – 100 mbps at middle schools and all high schools with a 100mbps fiber connection. The secondary libraries are open before school, at lunch and after school providing students access to computers with Internet connection. Canyon Hills, ROP, Community Day School and Home School are all special programs that also have Internet access.

Many elementary schools have after school tutoring and enrichment programs in which students have technology access at the school sites. Some elementary schools offer enrichment technology classes after school, which are funded by parent organizations.

In the District's modernization plan, several sites were upgraded with cabling, fiber, network hardware, routers, VOIP phones and IP based intercom systems. Some modernization efforts are still underway and include LCD Projectors with the Extron sound system. These are being mounted in all modernization classrooms as well as other schools. Some schools are adding student and teacher microphones in the classrooms. Interactive White Boards, Student Response Systems and document cameras are installed and available in many OUSD classrooms

Rosetta Stone software for English Learners is being used by some schools. A variety of adaptive technologies are in use in the District, specifically at Canyon Hills School which serves special needs students ages 3 – 22. Additionally, GATE students have technology embedded in advanced placement coursework and special projects at lower levels. All Elementary GATE teachers have been issued a laptop and LCD projector to assist them with the goal of integrating technology into the curriculum. Accelerated Reader and Reading Counts are used at most schools to encourage reading through incentive programs

based on individually acquired reading points. READ 180, Plato, Destination Math, Destination Reading, ST Math and MIND's Algebra Readiness are software options available to students to improve foundation skills with reading and/or math. Plato software is used to review basic skills for students preparing for the CA High School Exit Exam (CAHSEE) and for students needing assistance in other core subject areas at the high school level.

All teachers and students have "anytime anywhere" access to the following online resources: Blackboard, Data Director, Discovery United Streaming, ABI (student system), Destiny (online library), SIRS, EBSCO (online databases), Plato, Virtual Training online textbook resources, Student Portal, and various teacher tutorials.

One middle school and two high schools are offering a 1:1 laptop immersion program which integrates laptops into English and Social Studies classes. These programs encompass approximately 950 students, and the demand for more classes is growing.

Orange LIVE! (Learning through Interactive Virtual Education) is the OUSD online learning program for high school students. In 2010-2011 OUSD offered 23 online classes through this program with approximately 1000 students enrolled. The classes offered online are: Geometry, Algebra II, AP Biology, Health, English 10, English 11, English 12, AP Art History, Spanish I, Spanish II, Spanish III, US History, Psychology, World History, Government, and Economics. Additional online courses will be offered each year until all core courses are available online.

### **3b. Description of the district's current use of hardware and software to support teaching and learning**

Making technology an integrated tool and resource at all grade levels, for all core content areas is a major goal of the district and an overarching goal for this plan. Summer online training for students who will be enrolling in online coursework is available. Staff Development is offered in a variety of formats to ensure all teachers have the opportunity to be trained to meet the needs of the digital age student. These opportunities will continue to expand through the duration of this plan.

Highlights of the existing uses of technology include the following:

- Standards-based lessons are being developed and posted on grade level "Blackboard" sites for all K-12 staff. Blackboard is a proprietary software/server program available to districts on a subscription basis. It provides virtual learning spaces through the Internet available to teachers, students and parents. Every OUSD teacher is provided a Blackboard virtual space, and many teachers are using it extensively following training and peer coaching. It is a district goal for every teacher to have an active, current Blackboard site.
- All students have electronic folders for student work accessed either in a classroom, library, or in a computer lab hosted on the school server. Teachers have access to all student electronic folders for review. This is a significant and authentic demonstration of student technology skills. Each student also has individual storage space on Blackboard making it easier to work to access work and projects from home or at school.
- Assignments and Learning Modules are available on Blackboard. Many teachers use this communication and teaching tool as an integral part of their instruction as it allows them to extend the school day.
- Online testing and surveys are available for teachers and students via Blackboard from the district web page and Survey Monkey.

- Laptop classes in English/History where students bring their own laptops to learn in a 1:1 computer-to-student ratio as mentioned above has expanded each year. Currently classes are held at McPherson Magnet 6-8, El Modena, and Canyon high schools with expansion plans anticipated as a result of growing interest.
- Wireless laptop carts are used to reduce the computer-to-student ratio in core content areas at many schools. Wireless technology will continue to expand through the life of this plan as it is economically feasible and reduces the student-to-computer ratio to 1:1. The installation of the wireless networks at schools is enabling the teachers to use the carts more easily.
- Information Literacy is taught by Librarians to English teachers and English/History classes.
- All schools' libraries are fully automated using the Destiny Program. Parents and students are able to access the Destiny online catalog from anywhere via the web.
- Online learning databases like EBSCO and SIRS are available free to teachers and students from the district web page.
- Aeries Online Gradebook is used by most secondary teachers and a growing number of elementary teachers. Students and Parents have online access to the online gradebook through the Student Portal and Parent Portal. Teachers, students, and parents have access to student information, attendance, class schedules, transcripts and completed graduation requirements online.
- All OUSD teachers submit report cards and attendance online through ABI (Aeries Browser Interface) and have 24 hour access.
- Discovery Education's United Streaming videos are used extensively by teachers to enhance lessons in a broad range of subject areas. There are 4000 digital streaming videos and 45,000 digital images available to teachers and students at school and at home through a link on the OUSD webpage.
- Virtual Training is available to all OUSD teachers and students for individual online learning of over 100 technology programs anytime or anywhere.
- Special Education offers a special program called Fast ForWord to improve reading for students below grade level. It incorporates a variety of technologies as appropriate.
- Special Education utilizes an electronic IEP through the SEIS program to enhance communication between students and parents. Special Education has also equipped every Special Education teacher, Nurse, and Psychologist with a laptop.
- Data Director, Student Data System is accessible to all teachers and administrators from school or home to guide data driven decisions to personalize instruction, ensuring improvement in student achievement. Destination Math and Reading are used within the Data Director program for interventions.
- Students needing assistance with coursework and review for the CA High School Exit Exam (CAHSEE) have access to OUSD iSchool which utilizes Plato, integrated learning software that improves basic skills at school and home.
- Special Programs Department has implemented Avenues Program (K-6), Insight (Middle School) and Edge Program (High School) for student to improve English skills at many OUSD schools. Some schools are also using Rosetta Stone software for language acquisition.
- Reading Counts and Accelerated Reader are used at OUSD schools to encourage reading and measure individual reading growth. READ 180 is a successful technology reading intervention currently used at thirteen sites.
- Plato, Destination Math, Destination Reading, and Mind Institute Math (ST Math and Algebra Readiness) are programs being used at numerous schools to improve foundation math skills. Students have access to these programs at school and home.

- Animation classes are offered at all four high schools that incorporate video conferencing with professional animators from Disney, Warner, Pixar and various other studios.
- Video Conferencing is available at four high schools, one middle school and the district office to enrich subject area curriculum such as classes talking with authors, scientist, etc.

OUSD strives to give students access to these web 2.0 technology tools, so that learning remains interactive, creative, and dynamic. Some of the web 2.0 technology tools are:

- *Blogs*: Students create web entries to reflect on and analyze course-related topics and assignments. They also review and comment on their peers' postings, and teachers participate with students in the evolving dialog within Blackboard, a password protected learning environment.
- *Captivate*: This stand-alone software makes it easy for teachers to quickly create interactive simulations, tutorials and demonstrations. Content is made engaging through interactivity, audio and video. This tool is also used to create staff development tutorials to train teachers in new software as well as tutorials for parents and support staff.
- *Edmodo*: Teachers are setting up private classrooms on Edmodo to allow a variety of ways for students to communicate with their class and teacher. Students can choose to receive their communication through regular email, text, or twitter. Teachers are finding this tool is a great way to communicate with students and have students assist other students. It is built in a safe environment for education.
- *Elluminate*: Using this feature as a synchronous learning environment, teachers and students chat in a real-time virtual classroom environment for live discussions and dynamic interactions that result in engaged dialogue and improved comprehension. Designed for distance education and collaboration in academic institutions, the Academic Edition is used to add live discussion and dynamic interaction to OUSD online classes. Many students report that Elluminate sessions are their favorite interactive aspect of the online classes.
- *Glogsters*: Students create interactive online posters for projects incorporating text, music, images and video. Teachers create Glogsters to introduce new units and projects.
- *Pixton*: Teachers are assigning projects and having students produce a comic strip using Pixton.com click-n-drag comic creator. Students are experiencing great web 2.0 technologies.
- *PhotoStory and Windows LIVE*: Teachers and students create a gallery of pictures in a presentation with music or audio. This is used for projects in many OUSD classrooms.
- *Podcasts*: Teachers capture audio events (songs, speech, sounds, etc.) and post them to their Blackboard through a data structure called RSS. Orange LIVE! Integrates podcasts into the online course environment without any additional infrastructure which allows teachers to easily create RSS feeds, post episodes, and lets students subscribe to course feeds with one click.
- *Respondus*: Teachers use this powerful tool to create and manage exams and surveys. Questions, feedback, and settings can be completed offline in a Windows environment and then published directly to Blackboard. Respondus accepts images from rich-text files for importing questions and also features six question formats. Students complete exams online within the time parameters set by their teachers.
- *SoftChalk*: This software makes reading text an interactive process. Teachers create guided readings, enhanced with text poppers, labeling activities, images, movies, sound files and live links to websites, as well as self-assessing comprehension questions for the students.
- *StudyMate*: Teachers create ten Flash-based study and review activities and games for students. The Flash activities are published directly to the Blackboard sites and students use them to review concepts for tests. Teachers add images directly into the various study activities; links to web sites,



audio, and video clips are also included in the activities. The newest version of StudyMate has an export to iPod feature.

- *Safe Access*: As a Blackboard “building block,” this software provides seamless online plagiarism prevention. Student and teachers submit papers in a variety of formats, including Microsoft Word®, PDF, PostScript, WordPerfect, plain text, HTML, or any text based document via cut and paste to verify originality of student work.
- *Wikis*: Teachers and students create and edit digital content quickly and easily through this collaborative writing tool. By facilitating such online interaction, Wikis build connections and foster collaborative learning and discussions. Students collaborate on projects within a password protected environment.
- *Wimba*: These voice tools enable teachers to record sound files to put in email, documents or Blackboard announcements. Teachers and students also participate asynchronously in “voice boards,” an auditory form of discussion boards.
- *Xtranormal*: Teachers and students create 3D video clips using this text to movie feature –rich online flash movie maker. Xtranormal is used for introductions to projects/lessons by teachers and students use Xtranormal for projects. This is another great web 2.0 tool.

### **3c. Summary of the district’s curricular goals that are supported by this technology plan**

The OUSD Mission Statement reads: “The Orange Unified School District, being committed to planning for continual improvement, will offer a learning environment of excellence, with high expectations, to provide each student with the opportunity to be able to compete in the global economy.”

Throughout the life of this three year plan, the district’s curricular focus is on foundational skills in English Literacy and Math, incorporating Reading, Language Arts skills and Math improvements at all levels. The documents that guide OUSD instruction are the Reading, Language Arts, and Math state content standards, which are incorporated into the OUSD Course of Study and Curricular Pacing Guides. The district’s curricular goals, as referenced in the above documents, are integrated into and supported by the goals, objectives and implementation activities of this Technology Plan.

### **3d. List of clear goals, measurable objectives, annual benchmarks and an implementation plan for using technology to improve teaching and learning by supporting the district is curricular goals.**

#### **3d. GOAL ONE**

**Students will learn in a technology-rich environment that supports the OUSD standards-based curriculum and results in continual improvement in student achievement and digital citizenship.**

#### **Objective 3d.1A**

*By June 2014, 80% of OUSD schools will meet or exceed annual API schoolwide growth targets as measured by the State Assessment program, which includes STAR testing.*

#### **Benchmarks:**

- By June 2012, 70% of OUSD schools will meet or exceed annual API school wide growth targets as measured by the State Assessment program, which includes STAR testing.
- By June 2013, 75% of OUSD schools will meet or exceed annual API school wide growth targets as measured by the State Assessment program, which includes STAR testing.

- By June 2014, 80% of OUSD schools will meet or exceed annual API school wide growth targets as measured by the State Assessment program, which includes STAR testing.

### **Objective 3d.1B**

*By June 2014, 40% of high school students will participate in at least one Orange Live! online class that fulfills district expectations for academic content rigor and alignment to curricular standards, as evidenced in student transcripts and/or attendance records before their graduation.*

#### **Benchmarks:**

- By June 2012, 20% of high school students will participate in at least one Orange Live! online class that fulfills district expectations for academic content rigor and alignment to curricular standards as evidenced in student transcripts and/or attendance records before graduation.
- By June 2013, 30% of high school students will participate in at least one Orange Live! online class that fulfills district expectations for academic content rigor and alignment to curricular standards as evidenced in student transcripts and/or attendance records before graduation.
- By June 2014, 40% of high school students will participate in at least one Orange Live! online class that fulfills district expectations for academic content rigor and alignment to curricular standards as evidenced in student transcripts and/or attendance records before graduation,

<b>Implementation Activities</b>	<b>Date</b>	<b>Target Audience</b>	<b>Responsibility</b>
All schools must have adequate bandwidth to accommodate classroom needs and ensure full accessibility of services and support. See infrastructure for specific timelines and site needs.	July 2011	Teachers Students	IS Director, Facilities Director
Provide awareness sessions, demonstrations, incentives, trainings for sites to purchase and implement software to encourage and improve Reading Language Arts and Writing skills (e.g.: Reading Counts, READ 180, Fast ForWord, Safe Assign, CAHSEE support programs, etc), and monitor reading improvement through online reading inventory assessments and professional learning communities.	July 2011, Ongoing	Principals and Teachers	ET Director, Coordinator <i>Will Assist:</i> Librarians, Technology Committee, Instructional Technology Teacher Coaches (ITC) Curriculum Adm
Provide awareness sessions, demonstrations, incentives and trainings for sites to purchase and implement software that improves and enriches mathematics skills at all levels (such as Destination Math, ST Math (Mind) and Plato)	July. 2011, Ongoing	Principals and Teachers	ET Director, Coordinator <i>Will Assist:</i> Librarians, Technology Committee, ITCs, Curriculum Adm
Provide demonstrations and incentives for the purchase and installation of graphic organizers and software that supports writing at all grade levels (such as	July .2011 ongoing	Principals and Teachers	ET Director, Coordinator <i>Will Assist:</i> Librarians,

Kidspiration, Inspiration, Amazing Writing Machine, KidPix Deluxe, Blogs, Journals, Wikis, E Portfolios and Web 2.0 tools).			ITCs, Technology Committee, Curriculum Adm
Develop and disseminate learning units that are aligned with state and district standards, which include activities in Wimba, Elluminate Live!, StudyMate, Captivate, Wikis, Blogs, Podcasts, United Streaming, Soft Chalk and Respondus and global WebQuests for students at all grade levels to support standards and reinforce core skills. This will be supported with teacher trainings.	ongoing	Teachers	ET Director, Coordinator  <i>Will Assist:</i> Teachers, ITCs Curriculum Adm
Recommend adoption of standards-based curriculum materials that are available with digital resources.	Yearly Spring Adoption	Department chairs, text book adoption committee	ET Director, Coordinator Curriculum Adm
Provide demonstrations, awareness sessions and registration materials for parents, students, teachers and administrators about OUSD online classes. Continue to increase online classes as enrollment increases in online classes. Maintain OrangeLIVE Online Classes web site.	Fall-Spring	Parents, Students, Teachers, Administrators	ET Director, Coordinator, <i>Will Assist:</i> Curriculum Admn, Principals
Expand options for asynchronous learning opportunities (through Blackboard) for all students that encourage writing for real audiences and effective use of online resources, Blogs, Wikis, podcasts, and voice boards in a secure and safe environment.	2011 ongoing	Teachers and Students	IS/ET Director Coordinator
Tech Support for sites to ensure successful implementation of specialized software to improve Reading, Language Arts and Math.	2011 Ongoing	Teachers and Students	IS Manager, District Technicians
Continue the partnership with Alternative Education schools so that Alternative Education students will continue to be able to participate in online classes.	2011 ongoing	Alternative Education Students	ET Director, Coordinator Alternative Ed. Coordinator
Expand K-6 global, online, and interactive projects that require web resources, including videoconferencing and Elluminate Live! to support core content and foundational skills development.	Ongoing	Teachers and Students	ET Director, Coordinator
Disseminate information and support for	Ongoing as	Teachers and	ET Director,

virtual field trips and other video streaming and video conferencing activities that enrich the core curriculum.	events are complete	Students	Coordinator
--	---------------------	----------	-------------

Evaluation Instrument(s): Data To Be Collected	Evaluation Schedule	Program Analysis/ Modification Process	Funding Resources
1a – State test data, Interim District assessments in reading and math called pacing standards assessments (PSA)	CST - Annually PSA- Quarterly	District and site self evaluation. Meetings and decisions related to target data and adoption of improvement plan	No additional cost – Purchase of additional software or resources will be funded from existing IS/ET Budget, categorical funds and site funds
1b – Enrollment details showing increases in online classes offered and enrollments by year, and pass rates, with percentages of graduates completing online classes tallied annually	Annually	District and site meetings to assist in development of online expansion, recruitment and training of staff and review of dropout rates. Annual review of enrollment	No additional resources needed

**3e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.**

## 3e. GOAL TWO

**Students will graduate from OUSD equipped with digital age literacy, be capable, inventive thinkers, sound problem solvers, and effective communicators.**

### Objective 3e.2A

*By June 2014, all students will routinely participate in a variety of project-based activities requiring digital age literacy as measured by grade reports and online student folders.*

#### **Benchmarks:**

- By June 2012, 65% of OUSD students will participate in project based activities requiring digital age literacy as measured by grade reports and online student folders.
- By June 2013, 85% of OUSD students will participate in project based activities requiring digital age literacy by grade reports, and online student folders.
- By June 2014, all OUSD students will participate in project-based activities requiring digital age literacy as measured by grade reports, and online student folders.

**Objective 3e.2B**

*By June, 2014 all secondary students will complete basic technology skills and information literacy training through a variety of options: Freshman Seminar, Middle School Computer Classes, Online Training Unit for Online Classes, Media Center-based information literacy units with English classes*

**Benchmarks:**

- By June 2012, 65% of secondary students will complete basic technology skills and information literacy training through a variety of options: Freshman Seminar, Middle School Computer Classes, Online Training Unit for Online Classes, Media Center-based information literacy units with English classes.
- By June 2013, 85% of secondary students will complete basic technology skills and information literacy training through a variety of options: Freshman Seminar, Middle School Computer Classes, Online Training Unit for Online Classes, Media Center-based information literacy units with English classes.
- By June 2014, all secondary students will complete basic technology skills and information literacy training through a variety of options: Freshman Seminar, Middle School Computer Classes, Online Training Unit for Online Classes, Media Center-based information literacy units with English classes.

**Objective 3e.2C**

*By June 2014, 85% of elementary students will participate in basic technology skills and information literacy activities through grade leveled standards-based content enhancements requiring the integration of various technologies.*

**Benchmarks:**

- By June 2012, 50% of elementary students will participate in basic technology skills and information literacy activities as defined through grade leveled standards-based content enhancements requiring the integration of various technologies.
- By June 2013, 65% of elementary students will participate in basic technology skills and information literacy activities as defined through grade leveled standards-based content enhancements requiring the integration of various technologies.
- By June 2014, 85% of elementary students will participate in basic technology skills and information literacy activities as defined through grade leveled standards-based content enhancements requiring the integration of various technologies.

Implementation Activities	Date	Target Audience	Responsibility
Review and refine technology competencies for Freshman Seminar and middle schools' required computer class and collaborate with sites. Determine how and by whom skills will be reviewed.	2011 ongoing	Teachers and Principals	IS/ET Director, Coordinator <i>Will Assist:</i> Librarians, Freshman Seminar Teachers and MS Computer Teachers
Review and update existing Technology Standards for alignment with new adoptions	2011-2014	Teachers and Students	IS/ET Director, Coordinator, ITCs

and improved integration with curriculum standards. The focus will be on the concentration on elementary skills incorporating new ISTE NET student standards.			Tech Committee
Continue to expand standards based learning units posted and available on Blackboard.	Ongoing	Teachers and Students	IS/ET Director, Coordinator, ITCs
Continue to integrate Information Literacy Unit into technology component of Freshman Studies and HS English course and the computer class for Middle School. Conduct training/awareness sessions at faculty meetings so all content-area teachers can reinforce these concepts.	2011 ongoing	Students, Teachers	Librarians IS/ET Director, Coordinator, ITCs
Review and revise all Information Literacy Units to ensure current tools and technology are incorporated	2012 ongoing	Teachers	Librarians, IS/ET Director, Coordinator, ITCs
Continue to develop grade level and content area rubrics for technology-based projects ensuring principles of Information Literacy.	Ongoing	Teachers	IS/ET Director, Coordinator, ITCs
Conduct annual evaluation of online resources to ensure that all students have access to a variety of current, age-appropriate references and electronic media, such as EBSCO and SIRS.	Annual	Students	IS/ET Director, Coordinator, ITCs Librarians

<b>Evaluation Instrument(s): Data To Be Collected</b>	<b>Evaluation Schedule</b>	<b>Program Analysis/ Modification Process</b>	<b>Funding Resources</b>
HS Librarians and MS Computer Teachers will conduct a survey after the digital literacy units and re evaluate the effectiveness.	Semi Annually	MS computer Teachers and HS Librarians assessment and recommendation to Tech Committee on needed modifications	Existing site funds, IS/ET budget
Projects outcomes and teacher feedback on the technology integration into curricular components.	Annually	ITCs will review project outcomes and technology integration into curriculum tied to ISTE and make	No additional funds needed



		recommendations	
--	--	-----------------	--

**3f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that students can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; avoiding plagiarism (AB 307)**

### **3f. GOAL THREE**

**All OUSD students will be able to distinguish lawful from unlawful uses of copyrighted works including the following topics: The concept and purpose of copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; avoiding plagiarism, as appropriate for their grade levels.**

#### **Objective 3f.3A**

*By June 2014, all students will learn their school's plagiarism policy, concepts of copyright, Fair Use, lawful/unlawful downloading and peer-to-peer file sharing as part of the required curriculum,*

#### **Benchmarks:**

- By June 2012, 75% of all students will learn their school's plagiarism policy, concepts of copyright, Fair Use, lawful/unlawful downloading and peer-to-peer file sharing as part of the required curriculum and measured by the completion of required teacher log. (Fidelity Logs)
- By June 2013, all students will learn their school's plagiarism policy, concepts of copyright, Fair Use, lawful/unlawful downloading and peer-to-peer file sharing as part of the required curriculum and measured by the completion of required teacher log. (Fidelity Logs)
- By June 2014, all students will learn their school's plagiarism policy, concepts of copyright, Fair Use, lawful/unlawful downloading and peer-to-peer file sharing as part of the required curriculum and measured by the completion of required teacher log. (Fidelity Logs)

#### **Objective 3f.3B**

*By June 2014, 80% of high school, middle school and intermediate schools English/Language Arts teachers will use a plagiarism filter, such as Safe Assign as measured by Blackboard usage statistics. Other subject area Teacher will also use one of these tools.*

#### **Benchmarks:**

- By June 2012, 50% of high school, middle school and intermediate schools English/Language Arts teachers will use a plagiarism filter, such as *Safe Assign* as measured by Blackboard usage statistics.
- By June 2013, 65% of high school, middle school, and intermediate schools English/Language Arts teachers will use a plagiarism filter, such as *Safe Assign* as measured by Blackboard usage statistics.
- By June 2014, 85% of high school, middle school and intermediate schools English/Language Arts teachers will use a plagiarism filter, such as *Safe Assign* as measured by Blackboard usage statistics.

Implementation Activities	Date	Target Audience	Responsibility
---------------------------	------	-----------------	----------------

Develop, publish and enforce plagiarism policy for each site consistent with the revised OUSD AUP.	Revisit annually in January of each year	Students	Principals, Teachers.
Develop high school student unit on plagiarism for English Classes and Freshman Studies class.	Revisit annually in June of each year.	Students	ET Director, Coordinator Librarians
Develop online unit in Blackboard for English/Language arts teachers on plagiarism policy, concepts of copyright, Fair Use, lawful/unlawful downloading and peer-to-peer file sharing. Offer incentives for its completion.	Revisit annually in July – August of each year.	Language Arts, Freshman Seminar, and MS Computer Teachers	ET Director, Coordinator Librarians

Evaluation Instrument(s): Data To Be Collected	Evaluation Schedule	Program Analysis/ Modification Process	Funding Resources
Graduation Records from MS computer class, Freshman Seminar class; Librarian and Teacher records on the Information Literacy Units Blackboard Statistics on Usage	Annual and quarterly on Information Literacy Units	Librarians and Teachers will make recommendations for modifications. As technology changes modifications to units will be incorporated.	Teacher Quality funds, ET Funds

**3g. List of goals and an implementation plan that describes how the district will address Internet safety, including how to protect online privacy and avoid online predators. (AB 307: Optional in 2007-08, required July 1, 2008)**

### **3g. GOAL FOUR**

**All OUSD students will learn and practice Internet Safety guidelines that include protecting online privacy and avoiding online predators.**

#### **Objective 3g.4A**

*By June 2014, all OUSD students will learn and practice Internet Safety guidelines that include protecting online privacy and avoiding online predators as measured by the completion of grade-appropriate lessons that will be routine components of the required curriculum.*

#### **Benchmarks:**

- By June 2012, 85% of OUSD students will learn and practice Internet Safety guidelines that include protecting online privacy and avoiding online predators as measured by the completion of grade-appropriate lessons that will be routine components of the required curriculum.
- By June 2013, 95% of OUSD students will learn and practice Internet Safety guidelines that include protecting online privacy and avoiding online predators as measured by the completion of grade-appropriate lessons that will be routine components of the required curriculum.



- By June 2014, all OUSD students will learn and practice Internet Safety guidelines that include protecting online privacy and avoiding online predators as measured by the completion of grade-appropriate lessons that will be routine components of the required curriculum.

Implementation Activities	Date	Target Audience	Responsibility
Continue to maintain an active and effective network safety filter to block the use of inappropriate websites.	Ongoing, Evaluated Annually.	Students, Teachers, and Administrators	Network Manager
Newly revised Acceptable Use Policy (AUP) for teachers will be implemented. AUP for students and teachers will be reviewed and revised annually.	June, 2011 AUP for students and teachers will be reviewed and revised annually.	Students, Teachers, Administrators and Employees	ET Director, Coordinator, HR Director
Publish and secure students' agreement with the Acceptable Use Policy	June, 2011 The Student Handbook AUP will be updated annually.	Students, teachers and employees	ET Director, Coordinator, CWA Director
Continue to review and evaluate policies and procedures to address breaches of Internet security and protect students' safety.	September 2011, Ongoing	Students Teachers	ET Director, Coordinator, CWA Director
Evaluate and review programs on Internet Safety for secondary and elementary level students.	Ongoing The programs will be re- evaluated semi-annually	Students, Teachers	ET Director, Coordinator, Librarians, ITCs
Review and communicate Internet safety issues with all administrative staff.	Ongoing Review annually	Administrators Parents	ET Director, Coordinator

Evaluation Instrument(s): Data To Be Collected	Evaluation Schedule	Program Analysis/ Modification Process	Funding Resources
<ul style="list-style-type: none"> <li>Teacher records, Fidelity logs on Internet Safety Programs</li> <li>Percentage of newly signed AUP</li> </ul>	Annual  Annual	Teachers will make recommendations to ITCs/ Principals on needed modifications	Categorical Funds for staff development

**3h. Description of goals about the district policy or practices that ensure equitable technology access for all students**

**3h. GOAL FIVE**

**Students will have access to a district baseline of high ability, age-appropriate instructional resources and technology that supports district curriculum standards in student centered, authentic learning environments.**

**Objective 3h.5A**

*By June 2014, all OUSD schools will meet or exceed district technology baseline standards that ensure equal and appropriate access for all students as measured by site technology inventories.*

**Benchmarks**

- By June 2012, 85% of OUSD schools will meet or exceed district technology baseline standards that ensure equal and appropriate access for all students as measured by site technology inventories.
- By June 2013, 95% of OUSD schools will meet or exceed district technology baseline standards that ensure equal and appropriate access for all students as measured by site technology inventories.
- By June 2014, all schools will meet or exceed district technology baseline standards that ensure equal and appropriate access for all students as measured by site technology inventories.

Implementation Activities	Date	Target Audience	Responsible
Review and update baseline technology standards for schools and classrooms. Publish on OUSD Portal.	annually	Principals and Staff	ET Director, Coordinator, Technology Committee
Identify site technology needs and establish site based priorities.	annually	Principal and Staff	ET Director, Coordinator, Principals Technology Committee
Review site infrastructure issues by location for capacity and upgrade needs.	annually	Principals and Staff	IS Manager
Develop annual installation and technical support plans.	annually/ quarterly	Principals and Staff	IS Manager, ET Director, Principals
California School Technology Survey/Inventory	annually	Staff, Students and Administrators	Ed Tech Staff

Evaluation Instrument(s): Data To Be Collected	Evaluation Schedule	Program Analysis/ Modification Process	Funding Resources
Survey sites to collect data on how many schools meet the basic technology standards	annually	Survey results will be presented to the Technology Committee so that modification or adjustments can be made.	Site funds categorical funds IS/ET budget

**3i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs**

### **3i. GOAL SIX**

**All teachers will have online access to the OUSD student system (Aeries) for online grade reporting, online gradebook, online student information, online attendance and disaggregated online local assessments (Data Director) that provide a broad variety of data elements reflecting general student achievement and build teacher capacity to tailor classroom instruction to meet individual student needs.**

**Currently, all teachers are required to use the Aeries report card and online attendance reporting. 95% of secondary teachers are using the online gradebook, but use of this gradebook at elementary levels varies.**

#### **Objective 3i.6A**

*By June 2014, all elementary teachers will consistently use the online gradebooks through Aeries Student System as measured by usage records posted on the OUSD Portal.*

##### **Benchmarks:**

- By June 2012, 65% of elementary teachers will use the online gradebooks through Aeries Student System as measured by usage records posted on the OUSD Portal.
- By June 2013, 85% of elementary teachers will use the online gradebooks through Aeries Student System as measured by usage records posted on the OUSD Portal.
- By June 2014, all elementary teachers will use the online gradebooks through Aeries Student System as measured by usage records posted on the OUSD Portal.

#### **Objective 3i.6B**

*By June, 2014 all classroom teachers will consistently use the online student data assessment system (Data Director) to view and manipulate classroom assessment data to make data driven decisions on personalizing instruction.*

##### **Benchmarks:**

- By June 2012, 60% of all classroom teachers will consistently use the online student data assessment system to make data driven decisions on personalizing instruction.
- By June 2013, 85% of all classroom teachers will actively use the online student data assessment system to make data driven decisions on personalizing instruction.
- By June 2014, all classrooms will consistently use the online student data assessment system to make data driven decisions on personalizing instruction.

<b>Implementation Activities</b>	<b>Date</b>	<b>Target Audience</b>	<b>Responsibility</b>
Continue the onsite support training for ABI gradebook with the ITCs. ITC offer training during school and after. All Tutorials and handouts for ABI Gradebook will be updated.	ongoing	Teachers, Administrators	ET Director, Coordinator, ITCs
Continue Listserv for peer to peer support in using grade book and resolving issues.	ongoing	Teachers	ET Director, Coordinator, IS

			Specialist
Technology representatives (ITC) from each secondary site meet and train monthly to provide each site with support and up-to-date training on the Aeries online gradebook, Blackboard and emerging technologies.	monthly	ITC Representatives Teachers Elementary Principals	ET Director, Coordinator, ITC IS Specialist
Technology representatives from each elementary site meet and train monthly to provide each site with support and up-to-date training on the Aeries online gradebook, Blackboard and emerging technologies.	July 2011 ongoing monthly	ITC Representatives Teachers Elementary Principals	ET Director, Coordinator, ITC IS Specialist
Provide current usage reports online on the OUSD Portal to site principals to encourage and reward users who are consistently using the Aeries online gradebook.	ongoing	Administrators Site Technology Reps	IS Specialist
Identify high priority training needs by site, classroom, and issue related to grade book or data assessment to assist non users at any site where services are not being fully utilized.	ongoing	Teachers	Principals, Coordinator ITC Representatives
Teachers will meet on a regular basis to review data from the Data Director data system. Teachers will meet with their grade level and subject area specialists in these meetings. Teachers will make curriculum decisions based on the data review.	ongoing, regular meetings	Teachers Principals	Principals

<b>Evaluation Instrument(s): Data To Be Collected</b>	<b>Evaluation Schedule</b>	<b>Program Analysis/ Modification Process</b>	<b>Funding Resources</b>
Aeries and Data Director usage logs	annually	IS/ET staff would review logs and make recommendations to Principals and IET Director for modifications.	Business Services and Categorical funds
Online Attendance monitoring by site	daily	Site Staff would review online attendance and make recommendations for modifications to Principals.	IS Dept Funds
Logs from Teacher Meetings on Data Driven Decisions	ongoing	Principals will review teacher recommendations and make modifications.	Categorical Funds

**3j. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to improve two-way communication between home and school.**

### **3j. GOAL SEVEN**

**OUSD will extend school and classroom communication and instruction through online formats and emerging technologies and focus these efforts to ensure equitable two way access to appropriate users.**

#### **Objective 3j.7A**

*By June 2014, 95% of all teachers will use their virtual private classroom provided through OUSD Learning Management System (Blackboard) to post lessons and improve communications with parents and post lessons for their students as measured by Blackboard usage statistics.*

#### **Benchmarks:**

- By June 2012, 65% of all teachers will use their virtual private classroom provided through OUSD Learning Management System (Blackboard) to post lessons and improve communications with their students and parents as measured by Blackboard usage statistics.
- By June 2013, 80% of all teachers will use their virtual private classroom provided through OUSD Learning Management System (Blackboard) to post lessons and improve communications with their students and parents as measured by Blackboard usage statistics.
- By June 2014, 95% of all teachers will use their virtual private classroom provided through OUSD Learning Management System (Blackboard) to post lessons and improve communications with their students and parents as measured by Blackboard usage statistics.

<b>Evaluation Instrument(s): Data To Be Collected</b>	<b>Evaluation Schedule</b>	<b>Program Analysis/ Modification Process</b>	<b>Funding Resources</b>
Blackboard courses and course statistics	annually	ET Director and principals	ET budget

#### **Objective 3j.7B**

*By June 2014, all District schools will use the OUSD web page, School Listservs, Learning Management System (Blackboard), Parent Portal, Student Portal, Blackboard Connect phone communication and email to establish better home to school communications.*

#### **Benchmarks:**

- By June 2012, 75% of the OUSD schools will use the district web page, School Listservs, Learning Management System (Blackboard), Parent Portal, Student Portal, and email to establish better home to school communications.
- By June 2013, 90% of the OUSD schools will use the district web page, School Listservs, Learning Management System (Blackboard), Parent Portal, Student Portal, to establish better home to school communications.
- By June 2014 all of the OUSD schools will use the district web page, School Listservs, Learning Management System (Blackboard), Parent Portal, Student Portal, and email to establish better home-to-school communications.

<b>Evaluation Instrument(s): Data To Be Collected</b>	<b>Evaluation Schedule</b>	<b>Program Analysis/ Modification Process</b>	<b>Funding Resources</b>
Listserv, email archives, Blackboard	annually	ET Directors and	IS Budget, ET budget,

Connect site usage reports, and surveys of teachers and parents		Principals	Site budgets
---	--	------------	--------------

### **Objective 3j.7C**

*By June, 2014 all schools will show improvement over the baseline year in the percentage of parents and students accessing the Parent Portal, Student Portal and Blackboard to view student information, classroom lessons and homework, as measured by usage statistics on Blackboard, Parent Portal and Student Portal. Student and Parent Portal are linked to OUSD student system.*

#### **Benchmarks:**

- By June, 2012, 65% of schools will show improvement over the baseline year in the percentage of parents and students accessing the Parent Portal, Student Portal and Blackboard to view student information, classroom lessons and homework, as measured by usage statistics on Blackboard, Parent Portal and Student Portal.
- By June, 2013, 85% of schools will show improvement over the baseline year in the percentage of parents and students accessing the Parent Portal, Student Portal and Blackboard to view student information, classroom lessons and homework, as measured by usage statistics on Blackboard, Parent Portal and Student Portal.
- By June, 2014 all schools will show improvement over the baseline year in the percentage of parents and students accessing the Parent Portal, Student Portal and Blackboard to view student information, classroom lessons and homework, as measured by usage statistics on Blackboard, Parent Portal and Student Portal.

<b>Evaluation Instrument(s): Data To Be Collected</b>	<b>Evaluation Schedule</b>	<b>Program Analysis/ Modification Process</b>	<b>Funding Resources</b>
ListServ, email archives, Blackboard Connect Ed site usage reports, usage reports from the Parent and Student Portal	annually	ET Director and Principals	IS Budget

The following table defines the major activities that will support the attainment of benchmarks defined in Objectives 7A, 7B, 7C

<b>Implementation Activities</b>	<b>Date</b>	<b>Target Audience</b>	<b>Responsibility</b>
Continue to offer training series and support plan for teacher use of email, Parent Portal, Listserv and Blackboard. Continue to expand the Ed Tech Professional Development Blackboard site to make all technology training information available to all OUSD teachers. All trainings will be posted also on the GoSignMeUp site	ongoing	Teachers Principals	ET Director, Coordinator, ITC Representatives
Develop and update online tutorials for parents to demonstrate how to use Parent Portal and post on OUSD webpage.	Updated annually	Parents	IS specialist

Identify and disseminate Best Practices in the use of Blackboard to build motivation and enthusiasm among teachers through their PLC and the Professional Development Blackboard sites. Develop award incentives for teachers. Best Practices will be disseminated at Principals' Meetings and through their PLC Blackboard sites.	July, 2012 Quarterly update	Principals Teachers	ET Director, Technology Committee
Sites to offer parent trainings and information sessions on accessing Blackboard and Parent Portal	ongoing	Teachers Parents	I TC Representatives Principals
Instructions in English Acquisition adult classes that will setup Parent Portal accounts and train Parent's how to use the Parent Portal	ongoing	Parents	Special Programs Director, Principals
Continue training secretaries and Principals on using the school listserv effectively	ongoing	Secretaries Principals	IS/ET Staff
Continue to review Blackboard Connect Ed usage reports to be able to encourage effective usage.	ongoing	Principals	IS Staff/ ET Director
Continue to develop and expand the District Web Page for communication and learning resources.	ongoing	Teachers Students Parents community	ET Director Coordinator

**3k. Describe the process that will be used to monitor the Curricular Component (Sections 3d-3j) goals, objectives, benchmarks and planned implementation activities including roles and responsibilities.**

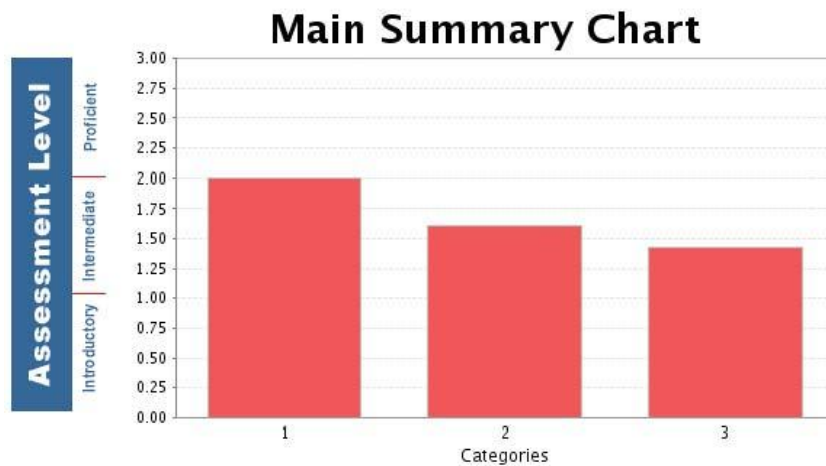
The process to modify and/or continue objective targets is included in the charts above, with clear responsibilities assigned, the majority of them assigned to administrators with the Education Division of the OUSD. These objectives and their related benchmarks will be monitored according to the timelines in the charts above, and will be revised or expanded in an annual review of all educational division goals and benchmarks related to student progress by the Technology Committee.



## 4. Professional Development

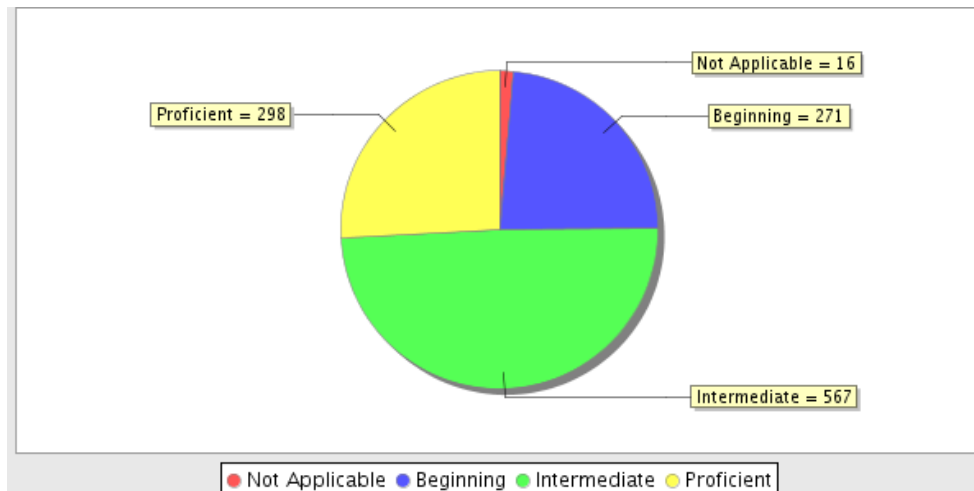
### 4a. Summary of the teachers' and administrators' current technology skills and needs for professional development.

The following charts summarize the technology proficiency of approximately 1,152 OUSD teachers and administrators (88%). As shown on the Computer Knowledge and Skills circle graph, approximately three-fourths of the teachers and administrators are at the Intermediate or Proficient level in basic technology skills. The Category Chart illustrates that the majority of OUSD teachers and administrators are proficient general computer knowledge and skills, internet skills, email skills and word processing. They have a high intermediate skill level in presentation software, spreadsheets and databases. Some teachers and administrators may need additional training in emerging new technologies.

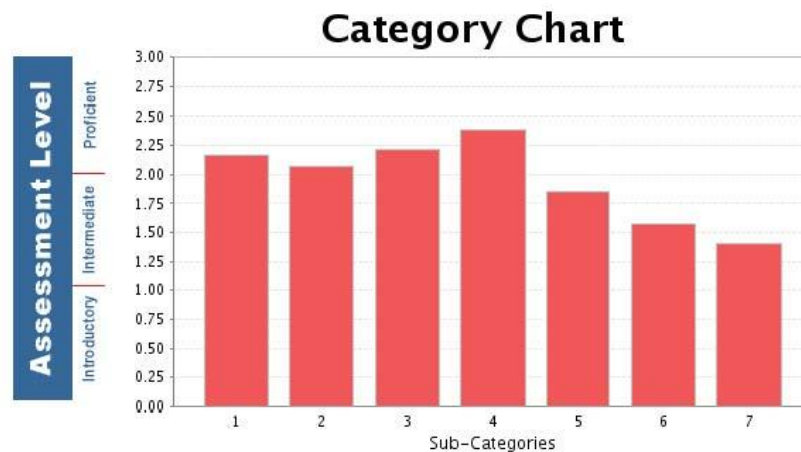


- 1 Computer Knowledge and Skills (Includes 1,152 in calculation)
- 2 CCTC Program Standard 9: Using Technology in the Classroom (Includes 1,150 in calculation)
- 3 CCTC Program Standard 16: Using Technology to Support Student Learning (Includes 1,150 in calculation)





Percentage	Number	
1%	16	Not Applicable
24%	271	Beginning
49%	567	Intermediate
26%	298	Proficient
<b>100%</b>	<b>1,152</b>	<b>Total Responses</b>



- 1 General computer knowledge and skills (Includes 1,152 in calculation)
- 2 Internet skills (Includes 1,151 in calculation)
- 3 Email skills (Includes 1,151 in calculation)
- 4 Word processing skills (Includes 1,152 in calculation)
- 5 Presentation software skills (Includes 1,151 in calculation)
- 6 Spreadsheet software skills (Includes 1,151 in calculation)
- 7 Database software skills (Includes 1,152 in calculation)

In addition to the technology proficiencies, many teachers are still at the beginning level of using their virtual private classrooms (Blackboard sites). Over 60% of teachers have been trained to develop and use their Blackboard sites with their classes. To meet the goals of increasing teachers' use of the Blackboard and online learning tools, additional and ongoing training is needed.

**4b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on district needs assessment data (4a) and the curriculum component objectives (sections 3d-3j) of the plan.**

## **4b. GOAL ONE**

***OUSD will provide teachers and administrators with high quality professional development training in a variety of formats so they are prepared to use digital age technologies to maximize student achievement***

### **Objective 4b.1A (Supports Curriculum Objective 3d 1A)**

*By June 2014, 95% of OUSD teachers and administrators will receive training and be proficient in Basic Technology Skills as measured by the edtechprofile.org and staff development records in GoSignMeUp.*

#### **Benchmarks:**

- By June 2012, 75% of all OUSD teachers and administrators will receive training and be proficient in Basic Technology Skills measured by the edtechprofile.org and staff development records in GoSignMeUp.
- By June 2013, 85% of OUSD teachers and administrators will receive training and be proficient in Basic Technology Skills as measured by the edtechprofile.org and staff development records in GoSignMeUp.
- By June 2014, 95% of OUSD teachers and administrators will receive training and be proficient in Basic Technology Skills as measured by the edtechprofile.org and staff development records in GoSignMeUp.

### **Objective 4b.1B (Supports Curriculum Objective 3d.1A)**

*By June 2014, 95% of elementary and secondary teachers will be trained to use electronic learning resources that support and enhance student achievement in content areas (such as Blackboard, Inspiration, Discovery United Streaming, and Interactive Technologies etc) as appropriate for their students, as measured by staff development records in GoSignMeUp and usage reports from software.*

#### **Benchmarks:**

- By June 2012, 75% of elementary and secondary teachers will be trained to use electronic learning resources that support and enhance student achievement in content areas (such as EBSCO, SIRS, Blackboard, Inspiration, Discovery United Streaming, Interactive Technologies etc) as appropriate for their students, as measured by the edtechprofile.org Teacher Technology Proficiency Assessment and staff development records in GoSignMeUp and usage reports from software.
- By June 2013, 85% of elementary and secondary teachers will be trained to use electronic learning resources that support and enhance student achievement in content areas (such as EBSCO, SIRS, Blackboard, Inspiration, Discovery United Streaming, Interactive Technologies etc) as appropriate for their students, as measured by the edtechprofile.org Teacher Technology Proficiency Assessment and staff development records in GoSignMeUp and usage reports from software.
- By June 2014, 95% of elementary and secondary teachers will be trained to use electronic learning resources that support and enhance student achievement in content areas (such as EBSCO, SIRS,

Blackboard, Inspiration, Discovery United Streaming, Interactive Technologies etc) as appropriate for their students, as measured by the edtechprofile.org Teacher Technology Proficiency Assessment and staff development records in GoSignMeUp and usage reports from software.

**Objective 4b.1C (Supports Curriculum Objective 3d.1A)**

*By June 2014, 95% of elementary and secondary teachers will be trained to use electronic learning resources that support the acquisition of basic skills in English Language Arts and Math (such as Plato, Destination Math, ST Math, MIND Institutes Algebra Readiness, Reading Counts, Read 180, etc. ) as appropriate for their students, as shown by staff development records in GoSignMeUp. All teachers of special populations will receive intensive training in these software applications.*

**Benchmarks:**

- By June 2012, 65% of elementary and secondary teachers will be trained to use electronic learning resources that support the acquisition of basic skills in English Language Arts and Math (such as Plato, Destination Math, ST Math, MIND Institutes Algebra Readiness, Reading Counts, Read 180, etc. ) as appropriate for their students, as shown by staff development records in GoSignMeUp. All teachers of special populations will receive intensive training in these software applications.
- By June 2013, 75% of elementary and secondary teachers will be trained to use electronic learning resources that support the acquisition of basic skills in English Language Arts and Math (such as Plato, Destination Math, ST Math, MIND Institutes Algebra Readiness, Reading Counts, Read 180, etc. ) as appropriate for their students, as shown by staff development records in GoSignMeUp. All teachers of special populations will receive intensive training in these software applications.
- By June 2014, 95% of elementary and secondary teachers will be trained to use electronic learning resources that support the acquisition of basic skills in English Language Arts and Math (such as Plato, Destination Math, ST Math, MIND Institutes Algebra Readiness, Reading Counts, Read 180, etc. ) as appropriate for their students, as shown by staff development records in GoSignMeUp. All teachers of special populations will receive intensive training in these software applications.

**Objective 4b.1D (Supports Curriculum Objectives 3e.2A, 3e.2B, 3e.3F, 3g.4B)**

*By June 2014, all librarians, middle school computer teachers, Freshman Seminar and English teachers will be trained and able to teach students about Information Literacy, Internet Safety, Digital Age Literacy, Copyright and Plagiarism as shown by staff development records in GoSignMeUp.*

**Benchmarks:**

- By June 2012, 75% of librarians, middle school computer teachers, Freshman Seminar and English teachers will be trained and able to teach students about Information Literacy, Internet Safety, Digital Age Literacy, Copyright and Plagiarism as shown by staff development records in GoSignMeUp.
- By June 2013, 85% of librarians, middle school computer teachers, Freshman Seminar and English teachers will be trained and able to teach students about Information Literacy, Internet Safety, Digital Age Literacy, Copyright and Plagiarism as shown by staff development records in GoSignMeUp.
- By June 2014, all librarians, middle school computer teachers, Freshman Seminar and English teachers will be trained and able to teach students about Information Literacy, Internet Safety, Digital Age Literacy, Copyright and Plagiarism as shown by staff development records in GoSignMeUp.

**Objective 4b.1E (Supports Curriculum Objectives 3e.2A, 3e.2C, 3g.4A)**

*By June 2014, all elementary teachers will be trained to teach students about Information Literacy, Internet Safety, Digital Age Literacy, Copyright, Plagiarism and Cyberbullying as shown by staff development records in GoSignMeUp and Teacher Fidelity Logs.*

**Benchmarks:**

- By June 2012, 75% of elementary teachers will be trained to teach students about Information Literacy, Internet Safety, Digital Age Literacy, Copyright, Plagiarism and Cyberbullying as shown by staff development records in GoSignMeUp and Teacher Fidelity Logs.
- By June 2013, 90% of elementary teachers will be trained to teach students about Information Literacy, Internet Safety, Digital Age Literacy, Copyright, Plagiarism and Cyberbullying as shown by staff development records in GoSignMeUp and Teacher Fidelity Logs.
- By June 2014, all elementary teachers will be trained to teach students about Information Literacy, Internet Safety, Digital Age Literacy, Copyright, Plagiarism and Cyberbullying as shown by staff development records in GoSignMeUp and Teacher Fidelity Logs.

**Objective 4b.1F (Supports Curriculum Objective 3f.3C)**

*By June 2014, all secondary English teachers will be trained to use Safe Access as shown by Blackboard use statistics. Upper elementary teachers, library and computer lab staff will also be trained.*

**Benchmarks:**

- By June 2012, 65% of secondary English teachers will be trained to use *Safe Access* as measured by Blackboard use statistics. Upper elementary teachers and library staff will be encouraged to attend trainings.
- By June 2013, 85% of secondary English teachers will be trained to use *Safe Access* as measured by Blackboard use statistics. Upper elementary teachers and library staff will also be trained.
- By June 2014, all secondary English teachers will be trained to use *Safe Access* as measured by Blackboard use statistics. Upper elementary teachers and library staff will also be trained.

**Objective 4b.1G (Supports Curriculum Objectives 3i.6A, 3i.6B)**

*By June 2014, all teachers and administrators will be trained to use the electronic data tools such as Aeries, ABI online Gradebook, Portals, Data Director, phones, Listservs, OUSD web pages, etc, in order to access data and communicate with parents and students as measured by staff development records in GoSignMeUp.*

**Benchmarks:**

- By June 2012, 80% of teachers and administrators will be trained to use the electronic data tools such as Aeries, ABI online Gradebook, Portals, Data Director, phones, listservs, District Web pages, etc., in order to access data and communicate with parents and students as measured by staff development records in GoSignMeUp.
- By June 2013, 90% of teachers and administrators will be trained to use the electronic data tools such as Aeries, ABI online Gradebook, Portals, Data Director, phones, listservs, District Web pages, etc., in order to access data and communicate with parents and students as measured by staff development records in GoSignMeUp.
- By June 2014, all teachers and administrators will be trained to use the electronic data tools such as Aeries, ABI online Gradebook, Portals, Data Director, phones, listservs, District Web pages, etc., in order to access data and communicate with parents and students as measured by staff development records in GoSignMeUp.

**Objective 4b.1H (Supports Curriculum Objectives 3h.5A)**

*By June 2014, all teachers will be trained to use emerging technologies, such as wireless laptop carts, document camera, Smart Boards, Smart Devices etc, appropriate to their grade levels as shown by staff development records in GoSignMeUp.*

**Benchmarks:**

- By June 2012, 30% of teachers will be trained to use emerging technologies, such as wireless laptop carts, document camera, Smart Boards, Smart Devices, etc, appropriate to their grade levels as shown by staff development records in GoSignMeUp.
- By June 2013, 60% of teachers will be trained to use emerging technologies, such as wireless laptop carts, document camera, Smart Boards, Smart Devices, etc, appropriate to their grade levels as shown by staff development records in GoSignMeUp.
- By June 2014, all teachers will be trained to use emerging technologies, such as wireless laptop carts, document camera, Smart Boards, Smart Devices, etc, appropriate to their grade levels as shown by staff development records in GoSignMeUp.

**Objective 4b.1I (Supports Curriculum Objectives 3d.1B)**

*By June 2014, all new and existing online teachers from all secondary schools will be trained to use the interactive tools necessary to develop their online courses. Online teachers will be given a minimum of 10 hours of staff development and course building time in the summer, and a minimum of 5 hours per month of staff development and support as measured by staff development records in GoSignMeUp.*

**Benchmarks:**

- By June 2012, all existing online teachers from all secondary schools will be trained to use the interactive tools necessary to develop their online courses. Online teachers will be given a minimum of 10 hours of staff development and course building time in the summer, and a minimum of 5 hours per month of staff development and support as shown by staff development records in GoSignMeUp. New online teachers will be added as needed and will have 20 hours of support during the summer as measured by staff development records.
- By June 2013, all existing online teachers from all secondary schools will be trained to use the interactive tools necessary to develop their online courses. Online teachers will be given a minimum of 10 hours of staff development and course building time in the summer, and a minimum of 5 hours per month of staff development and support as shown by staff development records in GoSignMeUp. New online teachers will be added as needed and will have 20 hours of support during the summer as measured by staff development records.
- By June 2014, all existing online teachers from all secondary schools will be trained to use the interactive tools necessary to develop their online courses. Online teachers will be given a minimum of 20 hours of staff development and course building time in the summer, and a minimum of 5 hours per month of staff development and support as shown by staff development records in GoSignMeUp. New online teachers will be added as needed and will have 20 hours of support during the summer as measured by staff development records.

In order to maximize class time for teachers and their students' achievement, OUSD has incorporated a variety of professional development strategies. With no professional development days, the district supports after school training sessions, Virtual Training, a Blackboard Teacher Support Site with handouts and short instructional videos, and Online Professional Development classes. Site based Instructional Technology Coaches (ITCs) meet monthly for training and receive a stipend to provide on-campus instruction and support for education technology, including Aeries, Aeries Gradebook, Blackboard, Data Director, emerging new technologies etc. For any technologies not specifically addressed by trainings within OUSD, teachers are able to use certificates for training at the Orange County Department of Education.

<b>Implementation Activities</b>	<b>Date</b>	<b>Target Audience</b>	<b>Responsibility</b>
Identify teachers and administrators who will need technology training in specific areas.	2011 Review and update annually	Teachers and Administrators	ET Director, Principals
Provide Basic Technology Skills training, including Office 2010, through online tutorials, after school sessions and OCDE classes.	Ongoing	Teachers and Administrators	ET Director, Coordinator, ITCs
Blackboard Basics Trainings will be offered through a variety of opportunities for example: After School trainings, Online Summer Institute, Summer Technology Academies, Online Tutorials like Virtual Training, handouts with tutorials posted on the Blackboard Teacher Support Sites.	Ongoing	Teachers	ET Director, Coordinator, ITCs
Provide trainings in Blackboard Building Blocks, such as SoftChalk, StudyMate, Wimba, etc, during after school trainings, Online Summer Institute, Summer Technology Academy, Virtual Training and tutorials/handouts posted on Blackboard Teacher Support Site. Offer incentives for successful completion and integration of Online Professional Development classes.	Ongoing	Teachers	ET Director, Coordinator, ITCs
Provide trainings in Web 2.0 tools such as Glogsters, Edmodo, Blogs, Wikis, and podcasts through after school sessions, Online Summer Institute, Summer Technology Academy, and Online Professional Development classes. Offer incentives for successful completion and integration of Online Professional Development classes.	Ongoing	Teachers	ET Director, Coordinator, ITCs Teacher Trainers
Continue to develop online tutorial units and handouts in Basic Technology Proficiency, including Office 2010, Blackboard basics, building blocks, Google Apps and Web 2.0 tool available on the	2011 Ongoing	Teachers	ET Director, Coordinator, ITCs

Blackboard Teacher Support Site.-			
Continue to update Blackboard Teacher Support site as a resource for all EdTech professional development activities. Publish online tutorials and handouts for teacher on each tool	Ongoing	Teachers	ET Director, Coordinator, ITCs
Offer drop-in instruction and support in Blackboard and Bb building block use in content areas, and Web 2.0 tools	Ongoing weekly	Teachers	ET Director, Coordinator, ITCs
Offer trainings in software that supports and enhances student achievement in all content areas like Inspiration, PhotoStory, Google Apps, Web 2.0 Tools and other relevant software in after school trainings.	Ongoing	Teachers	ET Director, Coordinator, ITCs
Train all teachers in software that support acquisition of basic skills in English Language Arts and Math during after school. For example: Destination Math, STMath, Reading Counts, Read 180	Annually	Teachers	ET Director, Coordinator, ITCs
Train teachers of at-risk classes in specific that support acquisition on basic skills in English Language Arts and Math after school trainings.	Ongoing	Teachers	Special Programs Director, ET Director, ITCs
Train librarians, LMTs and other teachers about Information and Digital Age Literacy in afternoon trainings.	September 2011, Update and train annually	Librarians, LMTs and teachers	ET Director, Coordinator, ITCs
Train librarians, LMTs and other teachers about Internet Safety in afternoon trainings. (Using the FBI-SOS program and CyberHero)	September 2011, Update and train annually	Librarians, LMTs and teachers	ET Director, Coordinator, ITCs
Train librarians, LMTs and other teachers about Copyright and Plagiarism in afternoon trainings.	September 2011, Update and train annually	Librarians, LMTs and teachers	ET Director, Coordinator, ITCs
Continue to train and support all teachers and staff to use Aeries and Aeries gradebook on site after school.	Ongoing	Teachers	ET Director, Coordinator, ITCs. IS Specialist

Meet monthly with Site ITCs to support Blackboard, Aeries, Aeries Online Gradebook and emerging technologies at each site.	Ongoing	ITCs	ET Director, Coordinator,
Site Technology Representatives, ITCs conduct trainings as needed at their school sites, individually or in groups as needed.	Ongoing	Teachers	ITCs
Continue to train Administrators and Teachers after school to use Data Director Data Management System to access and interpret student data and make informed decisions	Ongoing	Teachers and Administrators	Data Director Coordinator, ET Coordinator
Continue to support all PLC Blackboard sites for all, grade level, secondary schools and subject areas to share content and data-driven decisions.	June 2012	Teachers and Administrators	IS/ET Director, staff
Continue to train teachers and administrators to show students and parents how to access the Portals and be familiar with information that is available there. Train teachers and administrators to use OUSD's website, Listservs.	Ongoing	Teachers and Administrators	ET Director, Coordinator, ITCs
Train teachers, administrators and staff to use new telephones.	At time of installation each school site.	Teachers, administrators, and school staff	Principals, IS/ET Director, IS staff and Teacher Trainers
Train teachers in emerging technologies such as wireless laptop carts, document cameras, Smart Boards, Response Systems etc.	Ongoing	Teachers	ET Director, Coordinator, ITCs
Online teachers will attend at least 10 hours of staff development per summer and 5 hours per month during the school year. New online teachers will attend at least 20 hours for training and course development.	Ongoing	Online teachers	ET Director, Coordinator, ITCs
Train Teachers to develop and expand the Online Training Unit for Students	July 2011 and Review annually	Online students	ET Director, Coordinator,



<b>Evaluation Instrument(s): Data To Be Collected</b>	<b>Evaluation Schedule</b>	<b>Program Analysis/ Modification Process</b>	<b>Funding Resources</b>
<ul style="list-style-type: none"> <li>• Edtechprofile.org Teacher Technology Proficiency Assessment</li> <li>• GoSignMeUp records</li> <li>• EdTech Professional Development Blackboard site, usage statistics</li> <li>• Online Professional Development course completion records</li> <li>• Blackboard PLC sites</li> <li>• Aeries and Aeries Gradebook access statistics</li> <li>• Data Director usage statistics</li> <li>• Parent and Student Portal access statistics</li> <li>• OUSD website access statistics</li> <li>• Listserv distribution lists</li> </ul>	Semi-Annually	ET Director, Coordinator, and Data Director Coordinator will review and make modifications	Existing Site funds, Categorical Funds and ET Dept budgets

**4c. Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.**

The Education Technology Director is responsible for professional development related to technology in OUSD. The ET Director will work closely with principals, Technology staff, librarians and Site Technology Coaches to plan and deliver staff development sessions needed to meet all Curriculum and Professional Development goals. Education Technology and Information Services staff will be responsible for collecting the evaluation instruments mentioned above. Monitoring sessions will be held semi-annually in conjunction with meetings of the Technology Committee. The Technology Committee will make recommendations for revisions to the Professional Development Implementation Plans as needed to ensure that the Curriculum and Professional Development goals are met.

## **5. Infrastructure, Hardware, Technical Support, and Software**

**5a. Describe the existing hardware, Internet Access, Electronic Learning Resources, and technical support already in the district that will be used to support the curriculum and Professional Development Components (sections 3&4) of the plan.**

Information technology, when aligned to educational objectives, driven by institutional needs, and deployed in support of transformative visions can have real, measurable and lasting impact. Rather than continue to deploy and support technology in an ad-hoc, reactive and scale-limited way, OUSD is committed to leveraging information technology as a strategic asset, one that helps solve real challenges for educators, students, parents and the administrators responsible for the efficient operation of Orange

Unified schools. A robust infrastructure will be maintained to support emerging technologies, curriculum, and the Professional Development Components detailed in this plan.

Network hardware includes routers, switches, and a wireless infrastructure that support high speed telecommunications links and Internet Access. Server hardware and software facilitates communication and supports Electronic Learning Resources. Desktops, laptops and handheld devices provide network access to the Districts teachers, students, staff, and administrators. The technical support for this infrastructure is provided by district technicians and systems.

## **Hardware**

### **Network Hardware**

Cisco routers are the District standard for connectivity to the schools and Internet. Router models vary depending on the site applications, instructional needs, technology in place, and VOIP (Voice-Over-IP) connectivity. Schools with the VOIP and InformaCast Intercom applications have an upgraded router for improved VOIP performance.

Cisco switches are the District standard for LAN (Local Area Network) connectivity at each school site. Switch models vary depending on the school site, building framework (i.e. traditional school with various separate buildings versus a single building campus) site applications, instructional needs, technology in place, and VOIP connectivity. Most schools are complete with standard equipment and VOIP. There are eighteen schools with VOIP/ Intercom that have in-line power switches that power both the IP phones and IP loud speakers.

The OUSD Technology Center houses the backbone routers and switches. Two Cisco 7200 series routers connect all the schools and district locations along with the District's 100 Mbps Internet connection. Two Cisco 6509 switches connect the District office, the enterprise network and application servers.

### **Servers and Applications**

All school and administrative sites have Fast Ethernet (100 Mbps) or Gigabit Ethernet (1000 Mbps). Cisco equipment supports the LAN backbones for all of the District sites.

The IS Department establishes and maintains the standards for all administrative and instructional servers. Server standards and vendor are established by what services the server will be housing.

### ***Desktops/Laptops***

In the interest of serving OUSD effectively, the Information Services and Educational Technology Departments establish and maintain the standards for all administrative and instructional computers. Desktops and laptops workstation standards include a three year warranty. The warranty is for onsite support and replacement of parts. Microsoft Office is ordered for each all administrative computer and teacher laptops. Open Office is used for student desktop and student laptops. An anti-virus program called CA e-Trust is the standard for every machine. Every machine has the Altiris program loaded for deployment, updates and software assistance. The equipment standards are posted on the OUSD web page and OUSD Portal. Desktops, handhelds and laptops are purchased as funds become available.

### ***Internet Access***

#### **Wide Area Network (WAN)**

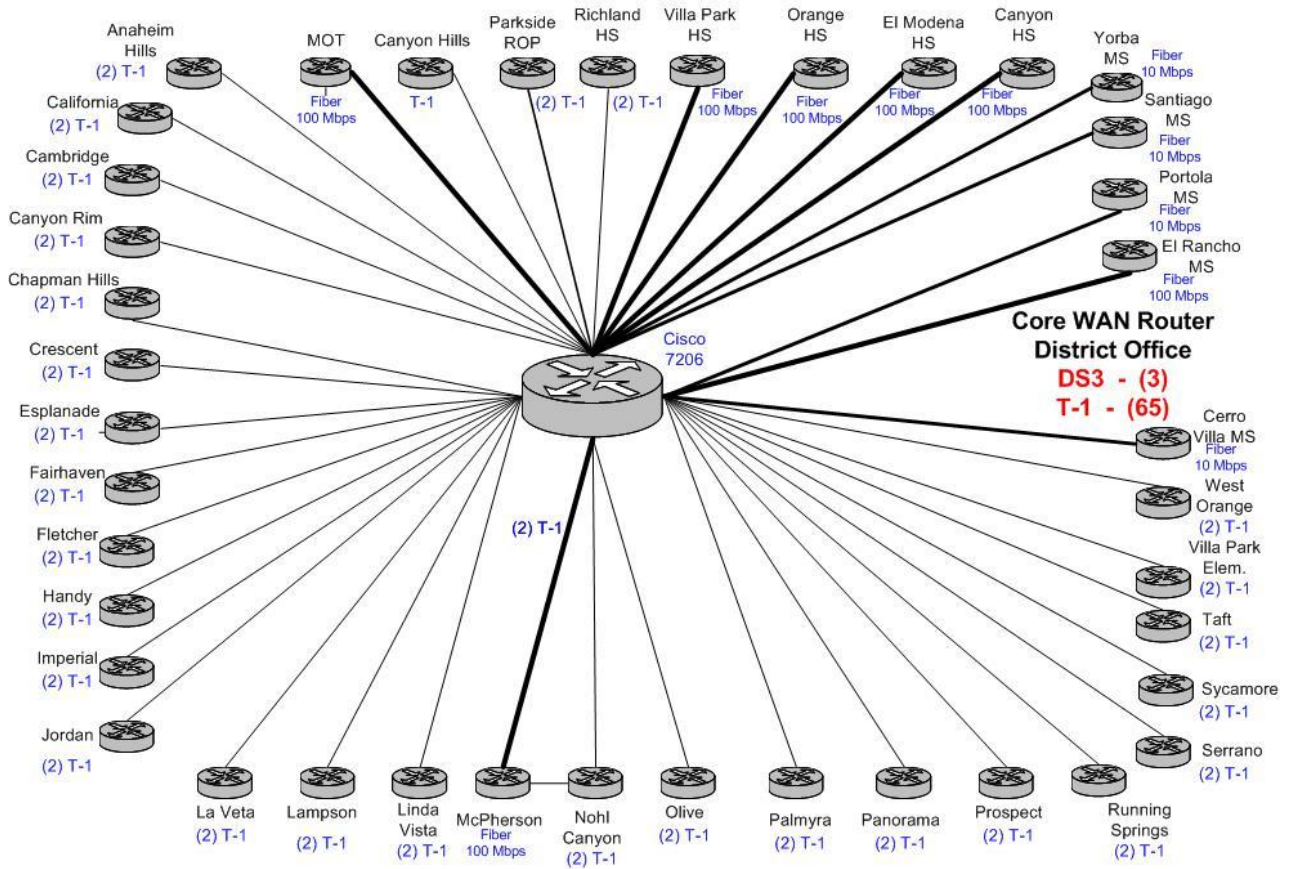
The district's wide area network (WAN) uses high-speed data circuits to connect each school and administrative site to the Information Services Technology Center. It consists of an OC-12 data circuit from which three 45 Mbps DS-3 circuits are currently being utilized. The three DS-3 circuits are channelized into individual T-1 circuits that provide connectivity to elementary schools and administrative Local Area Networks. The remaining four OUSD high schools, five OUSD middle schools, one independent charter middle school and one administrative site are connected by fiber at 10 and 100 Mbps. The district's Internet connection consists of a 100 Mbps fiber connection to the District's ISP.

Six ISDN PRIs support the district's Voice-Over-IP network and provide local off network and long distance calling to all district sites. All of these data circuits are provided by AT&T.

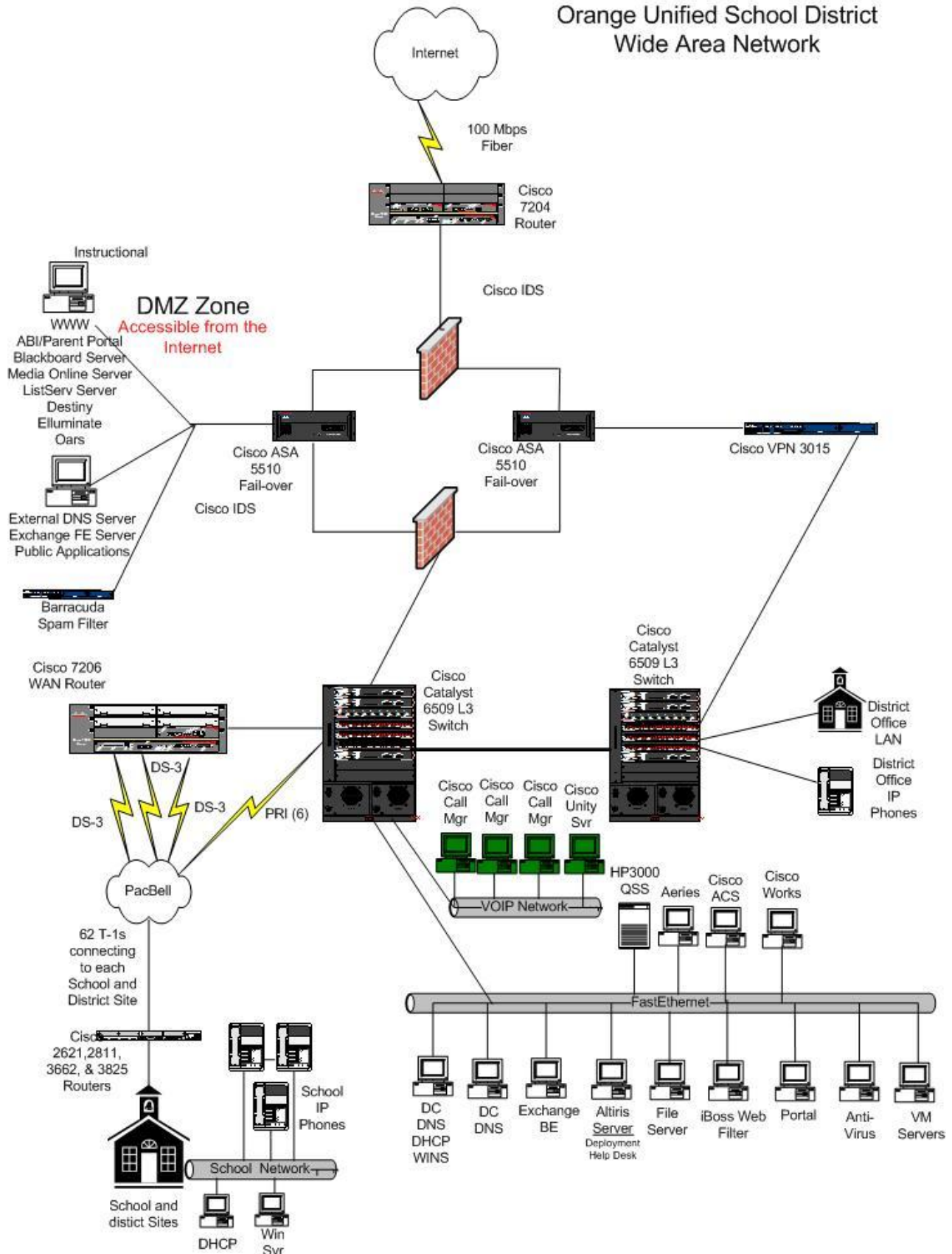
OPT-E-MAN is a switched Ethernet service that is provided by AT&T and is currently being utilized to provide the districts' four comprehensive High Schools with 100 Mbps connectivity. OPT-E-MAN is a fully managed service that uses optical transports with bandwidth options from 5 Mbps to 1 Gbps. A 500 Mbps host circuit is being utilized at the district office to provide 100 Mbps connectivity to the high schools and a 100 Mbps connection to the district's ISP.

The fiber connectivity to the five OUSD middle schools, one independent charter middle school and one administrative site are provided by Time Warner. A 1 Gbps host fiber connection is installed at the district office to support these sites.

# OUSD Wide Area Network



# Orange Unified School District Wide Area Network



## **Wide Area Network (WAN) and Bandwidth Connections**

The following tables reflect the current status and planned upgrades of the OUSD WAN. As a reference to the enclosed table, please consider the following: A single telephone line (regular telephone line) provides 64 Kbps of bandwidth. A T1 line/HiCap is the equivalent of 24 regular telephone lines put together or 1.54 Mbps. A DS-3/OC1 connection is the equivalent of 672 regular telephone lines put together or 28 T1 lines, or 45-52 Mbps. Mbps=1,000,000 bits per second.

<b>Elementary Schools</b>				
<b>School Site</b>	<b>Circuit Type(s)</b>	<b>Current Bandwidth</b>	<b>Needed Bandwidth</b>	<b>Estimated Date for Upgrade</b>
Anaheim Hills	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
California	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Cambridge	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Canyon Rim	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Chapman Hills	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Crescent	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Esplanade	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Fairhaven	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Fletcher	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Handy	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Imperial	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Jordan	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
La Veta	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Lampson	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Linda Vista	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
McPherson (K-8)	Fiber	100 Mbps	Planned as needed	Date TBD
Nohl Canyon	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Olive	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Palmyra	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Panorama	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Prospect	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Riverdale	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Running Springs	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Serrano	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Silverado	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Sycamore	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Taft	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Villa Park Elem.	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012

### Elementary Schools

School Site	Circuit Type(s)	Current Bandwidth	Needed Bandwidth	Estimated Date for Upgrade
West Orange	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012

### Middle Schools

School Site	Circuit Type(s)	Current Bandwidth	Planned Bandwidth	Estimated Date for Upgrade
Cerro Villa MS	Fiber	10 Mbps	Planned as needed	Date TBD
El Rancho MS	Fiber	100 Mbps	Planned as needed	Date TBD
Portola MS	Fiber	10 Mbps	Planned as needed	Date TBD
Santiago MS	Fiber	10 Mbps	Planned as needed	Date TBD
Yorba MS	Fiber	10 Mbps	Planned as needed	Date TBD

### High Schools

School Site	Circuit Type(s)	Current Bandwidth	Planned Bandwidth	Estimated Date for Upgrade
Canyon HS	Fiber	100 Mbps	Planned as needed	Date TBD
El Modena HS	Fiber	100 Mbps	Planned as needed	Date TBD
Orange HS	Fiber	100 Mbps	Planned as needed	Date TBD
Villa Park HS	Fiber	100 Mbps	Planned as needed	Date TBD
Richland	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012

### District Sites

Site	Circuit Type(s)	Current Bandwidth	Planned Bandwidth	Estimated Date for Upgrade
Canyon Hills TMR	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
Alternative Education Center	T-1 (2)	3 Mbps	Fiber 10 – 100 Mbps	2011-2012
District Office	(3) DS-3's total (3)DS-3's	(56) 1.54 Mbps channels	10 Gbps fiber	2011-2012



District Sites				
Site	Circuit Type(s)	Current Bandwidth	Planned Bandwidth	Estimated Date for Upgrade
	WAN link's (6) ISDN PRI (1) 500 Mbps OPT-E-MAN Host Circuit (1) 1 Gbps Fiber Host Connection	45 Mbps (69) voice channels 1.54 Mbps to each site 100 Mbps to Internet 100 Mbps to each HS	Host Connection  10 – 100 Mbps fiber to all sites	
MOT	Fiber	100 Mbps	Planned as needed	Date TBD

### **Local Area Network (LAN) Infrastructure: Fiber Optics and Classroom (Work Areas) Connectivity**

The district office is currently utilizing a fast Ethernet Local Area Network with a Gigabit Ethernet backbone and Category 6 cabling. The district standard for a school site consists of a fiber backbone between buildings and Category 6 cabling within each building.

All classrooms in the district are wired for Internet access with 8 connections in most elementary classrooms and 4 connections in most secondary classrooms. Elementary and Secondary schools undergoing modernization have 8 connections in each classroom.

### **Wireless Connectivity**

OUSD has been an early adopter of wireless technology in the classrooms. OUSD has a substantial number of classrooms that access the Internet and curriculum resources via wireless laptops. An updated wireless design is being developed and tested and will provide robust wireless connectivity supporting multiple devices per student. The design is based on one access point per classroom utilizing the latest wireless standards. The laptop classes are supported by the IS/ET department.

OUSD has been using mobile computer carts in the shape of wireless wheeled “carts.” IS/ET staff supports these carts which contain up to thirty-two wireless laptops that can be transported and used in one classroom one day and another class on the other side of campus on another day.

Integration of the wired and wireless network is critical for unified network control, scalability, security, and reliability. OUSD has been installing Cisco wireless LAN controllers to integrate into the existing OUSD network for advanced management capabilities and enhanced performance. Cisco Aironet lightweight access points connect to the LAN controllers for configuration and security. Lightweight access points and controllers are currently installed at most OUSD sites.

### **Local and Long Distance Service**

Local and long distance services are used to facilitate and enhance communication between district and school staff, teachers, and parents. Utilized services include POTS, Centrex, custom calling services, DID,



directory assistance, fax lines, long distance, calling cards, trunks, and voicemail. Voicemail services are provided through OUSD's Octel system, Cisco Unity System, and the telecom service provider. E-Rate and California Technology Fund discounts are utilized for these services. The entire non-discounted expenditure is budgeted each year to insure that sufficient budget is available.

### **Cellular/Paging Service**

Wireless services are used for fast, on-demand communication services for district administrative, staff, support, and transportation personnel while at school, in transit, on field trips and other educational activities. The services enhance communication, speed up service and tech assistance requests, and enhance school safety. Utilized services include cellular service, data service, PCS, and voicemail. Voicemail services are provided by the cellular service provider. E-Rate discounts are utilized for these services. The entire non-discounted expenditure is budgeted each year to insure that sufficient budget is available.

### **Telephones (PBX and VOIP)**

Voice over IP (VoIP) defines a way to carry voice calls over an IP network. IP Telephony utilizes the VoIP standards to create a converged voice and data network. District staff has continued to replace antiquated key systems with the District standard Cisco Voice over IP system. Funding for this technology is sought through strategic use of E-Rate funding, Digital Block Grants, facility upgrades, intercom replacements, and site funds. Staff training is provided by Information Services staff. The District continues to support existing systems that include Executone, NEC NEAX 2400, Tie, Cortelco, Aeries and Comdial phone systems.

### **InformaCast Intercom System**

InformaCast is a robust, full-featured intercom, public address, and bell system that allow users to simultaneously push an audio stream and/or a text message to multiple IP phones and InformaCast IP Speakers. A centralized server communicates with the IP phone and IP loud speakers that are installed at the VOIP schools. InformaCast is currently installed at ten OUSD school sites.

Elementary Schools				
School Site	Current Phone System	Phones in Classroom	Dial Tone in the Classroom	Infrastructure Upgrades Needed for VOIP
Anaheim Hills	Cisco VOIP	Yes	Yes	Planned as needed
California	Cisco VOIP	Yes	Yes	Planned as needed
Cambridge	Cisco VOIP	Yes	Yes	Planned as needed
Canyon Rim	Cisco VOIP	Yes	Yes	Planned as needed
Chapman Hills	Cisco VOIP	Yes	Yes	Planned as needed
Crescent	Cisco VOIP	Yes	Yes	Planned as needed
Esplanade	Cisco VOIP	Yes	Yes	Planned as needed
Fairhaven	Cisco VOIP	Yes	Yes	Planned as needed
Fletcher	Executone	No	No	Router Upgrade/PWR Switches
Handy	Cisco VOIP	Yes	Yes	Planned as needed
Imperial	Cisco VOIP	Yes	Yes	Planned as needed
Jordan	Cisco VOIP	Yes	Yes	Planned as needed

La Veta	Cisco VOIP	Yes	Yes	Planned as needed
Lampson	Cisco VOIP	Yes	Yes	Planned as needed
Linda Vista	Cisco VOIP	Yes	Yes	Planned as needed
McPherson (K-8)	Cisco VOIP	Yes	Yes	Planned as needed
Nohl Canyon	Cisco VOIP	Yes	Yes	Planned as needed
Olive	Comdial	Yes	Yes	Router Upgrade/PWR Switches
Palmyra	Cisco VOIP	Yes	Yes	Planned as needed
Panorama	Cisco VOIP	Yes	Yes	Planned as needed
Prospect	Cisco VOIP	Yes	Yes	Planned as needed
Running Springs	Cortelco	Yes	Yes	Router Upgrade/PWR Switches
Serrano	Cisco VOIP	Yes	Yes	Planned as needed
Sycamore	Cisco VOIP	Yes	Yes	Planned as needed
Taft	Cisco VOIP	Yes	Yes	Planned as needed
Villa Park Elem.	Cisco VOIP	Yes	Yes	Planned as needed
West Orange	Cisco VOIP	Yes	Yes	Planned as needed

### Middle Schools

School Site	Current Phone System	Phones in Classroom	Dial Tone in the Classroom	Infrastructure Upgrades Needed for VOIP
Cerro Villa MS	Comdial	Yes	Yes	Router Upgrade/PWR Switches
El Rancho MS	Cisco VOIP	Yes	Yes	Planned as needed
Portola MS	Cisco VOIP	Yes	Yes	Planned as needed
Santiago MS	Comdial	Yes	Yes	Router Upgrade/PWR Switches
Yorba MS	Cisco VOIP	Yes	Yes	Planned as needed

### High Schools

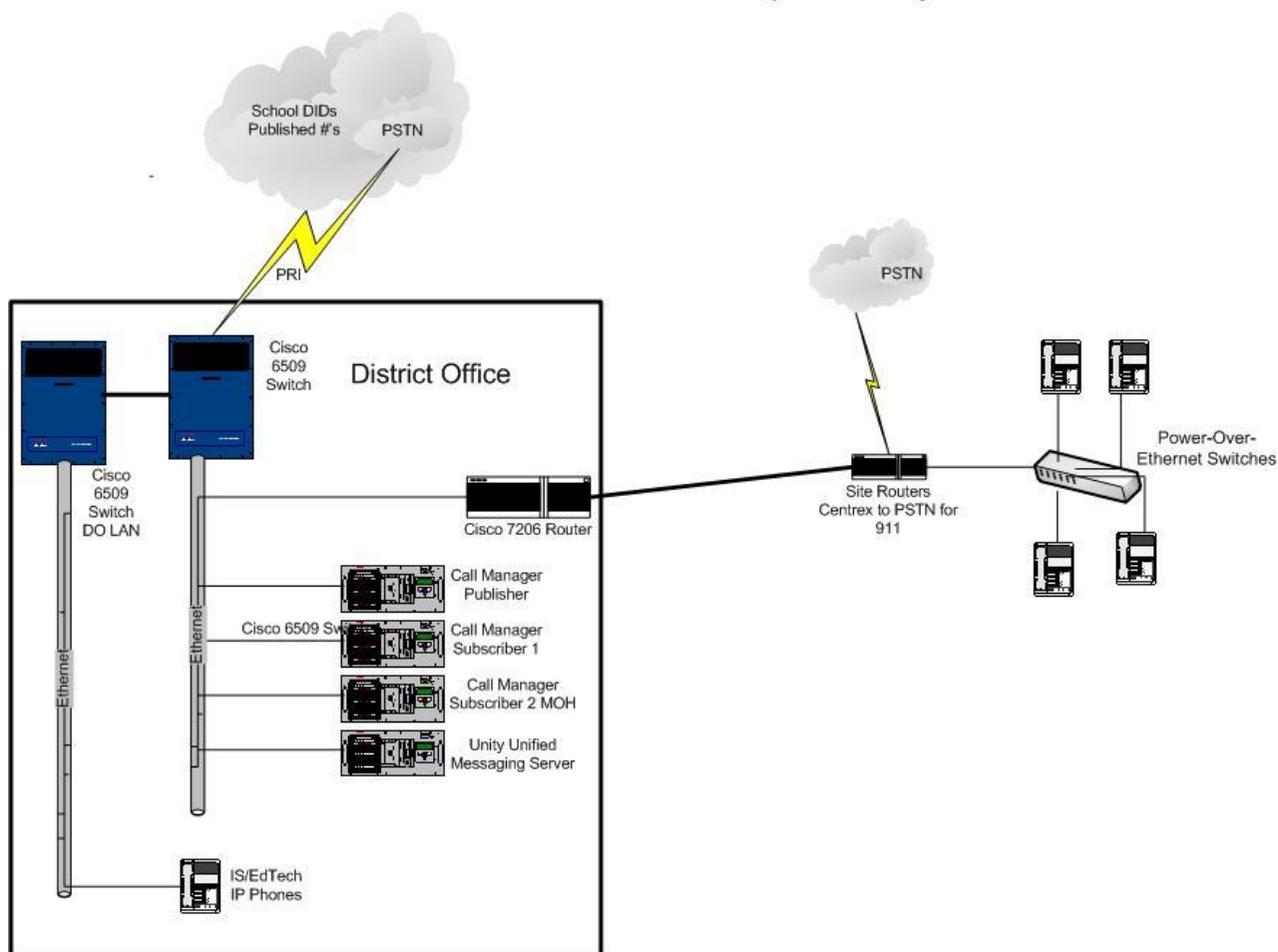
School Site	Current Phone System	Phones in Classroom	Dial Tone in the Classroom	Infrastructure Upgrades Needed for VOIP
Canyon HS	Cisco VOIP	Yes	Yes	Planned as needed
El Modena HS	Cisco VOIP	Yes	Yes	Planned as needed
Orange HS	Cisco VOIP	Yes	Yes	Planned as needed
Villa Park HS	Cisco VOIP	Yes	Yes	Planned as needed
Richland Continuation HS	Cisco VOIP	Yes	Yes	Planned as needed

### District Sites

School Site	Current Phone System	Phones in Classroom	Dial Tone in the Classroom	Infrastructure Upgrades Needed for VOIP
Canyon Hills TMR	Cisco VOIP	Yes	Yes	Planned as needed
ROP	Meridian/Cisco VOIP	Yes	Yes	Router Upgrade/PWR Switches

District Office	Cisco VOIP	Yes	Yes	Planned as needed
MOT Facility	Cisco VOIP	Yes	Yes	Planned as needed

## Voice-Over-IP (VOIP) Network



### Technology Center

The IS department has installed and continues to move physical servers to a virtualized server environment. This virtual environment utilizes SAN technologies, enterprise backup, and provides application services such as DNS, DHCP, WINS, E-mail, file sharing, and printing services. A significant effort is under way to further increase network performance, scalability, security, reliability and availability. The department is responsible for the backup of all of its administrative mission critical servers. An automated backup system is in place to backup all appropriate servers to disk and then to tape. Servers in the computer room are backed up nightly. Back-up tapes are stored in another building.

### Security

The integrity and security of district electronic data is of the utmost importance to the Information Services and Educational Technology departments. To this end, the networking staff is working to increase LAN and WAN security, as well as that of district servers. Various monitoring and security

packages are currently installed. As part of the network security process, the following security practices are in process or have been implemented:

- Virtual Local Area Network (VLAN) technology to provide secure and authorized access to necessary resources
- Remote access strategy including VPN to provide secure and safe off-site access
- Internet content filtering via the iBoss web filter
- Internet service restriction via the iBoss web filter
- Firewall using Cisco ASA Firewall hardware
- Host based intrusion detection to protect mission critical servers
- Cisco Secure ACS software to secure access to all standard LAN and WAN hardware
- CiscoWorks software to assist in the management of WAN, LAN, and security hardware
- Secure sockets layer protection for Internet accessible services via GoDaddy certificate
- DMZ perimeter to allow public Internet access to selected services
- Anti-Virus, Spyware, and Adware protection through CA eTrust
- E-mail virus protection through CA eTrust
- SPAM protection through a Barracuda Networks device
- Infrastructure to secure wireless access
- Secure and scalable IP Telephony infrastructure

### **SPAM Filtering**

The Barracuda Spam Firewall is an integrated hardware and software application that is designed to protect from spam, virus, spoofing, phishing and spyware attacks. The Barracuda server evaluates every email that is sent to the District. In a typical month, the spam filter blocks over 90% of all email that is sent to OUSD users.

### **Content Filtering**

The iBoss web filter is a comprehensive security solution that provides content filtering, detailed network traffic and user reports, an additional layer of spam blocking, message journaling, network security and bandwidth management. The district utilizes the iBoss web filter for Internet content filtering, bandwidth management and network and user reporting.

### **Internet Abuse Reporting**

The iBoss web filter reporting solution uses classification technology to accurately classify all Internet-based communication regardless of port or protocol. The district utilizes iBoss web filter to detect violations of the OUSD Acceptable Use Policy.

### **Virtual Private Networking (VPN)/Remote Connectivity**

The use of Virtual Private Network (VPN) technology allows a computer outside the firewall to “tunnel” through and access resources that are authorized to that particular user. Information Services currently utilizes a Cisco 3015 VPN Concentrator to provide scalable secure-remote access to appropriate district personnel. The advantage of VPN is that authorized staff can access secure internal services via the external public Internet.

### **Pelco Security Camera System**

The Pelco Security Camera system has been installed at all secondary schools and one elementary school. External surveillance camera systems are installed at the above stated school sites to enhance existing

security measures. The Student and Community Services department will also use the surveillance system to provide support to the sites. In addition, security personnel that work after hours will be able to respond quickly to security breaches. This information and remote viewing of camera (video information) systems will impact the existing WAN infrastructure as video will be shared throughout the internal infrastructure to authorized sites.

### **Anti-Virus Protection**

The CA e-Trust Manager provides a unified view of enterprise-wide security and enables administrators to configure, monitor, and maintain CA e-Trust products and services installed on the network from a single console. Multi-tiered active virus defense tools provide virus security for all possible points of entry including desktops, file servers, groupware, and Internet gateways. In addition, Microsoft's Software Update Service (SUS) automatically installs patch-related security vulnerabilities on all machines within the network.

### **OUSD Web Server**

The OUSD district web page [www.orangeusd.org](http://www.orangeusd.org) has been evolving since 1996. The district web site hosts a variety of resources for students, teachers, administrators, parents and the community. School web pages are hosted on the district web site and contain information about school goals, events, and activities. Parents and community members can easily access master calendars, district departments, school lunch menus, purchase school lunches, boundary information, board agendas, and press releases, as well as subscribe to school news through a Listserv. Parent Portal and Student Portal are available to all parents and students providing access to attendance, grades, student information, transcripts and more. Job opportunities and information about Human Resources are also available.

Curriculum and administrative resources for teachers, administrators, and students are accessible at school and home from the Resource Tools page on the district web site including an online library catalog which allows students to search their site libraries for books and Blackboard. Information about OUSD Online Classes is also available on the website. Teachers and students can also access the instructional help desk for technical support. The Staff page gives teachers access to resources such as payroll information, Time and Attendance, trainings and other valuable information. The district and state content standards and the alignment with OUSD current textbooks are available on the homepage. State testing scores and information is also available on this site.

### **E-mail**

The district utilizes Microsoft Exchange 2007 Enterprise to provide e-mail for district personnel. Several clients are used to access the Exchange server including Outlook 2010, Outlook 2007, Outlook 2003, Outlook 2000, Outlook XP and Outlook Web Access (Webmail). The E-mail system also provides each email account with a personal calendar, contacts and task list. All teachers, administrators and classified staff are provided with an OUSD email account. The newly revised OUSD Employee Acceptable Use Agreement must be signed before an account is established. The OUSD email account should be used for all electronic communications with parents. Currently students are not provided with OUSD e-mail accounts. The IS Department is currently evaluating the move to Exchange 2010.

### **OUSD Portal/Intranet**

The OUSD Portal is an intranet site for sharing information within the district. Unlike the Internet, the intranet operates on the internal network and provides speed, security and control to disseminate dynamic information and facilitate better collaboration between sites and departments. The intranet serves as a gateway to resource tools such as a web-based master calendar, online support desk, and equipment standards. All district forms are posted on the Portal. Human Resources, Support Services, Risk

Management and Educational Services utilize the portal to post many real time reports/ data through a software package called Crystal Reports. Information Services and Educational Technology will collaborate in extending the portal to support instructional and educational applications.

### **Listserv**

Lyris ListManager is a high-performance application for opt-in email announcements and online discussion groups. ListManager provides web signup forms and makes it simple for list members to manage their own subscriptions. The OUSD LISTSERV is available on the OUSD web page. Every school and the district office have a unique LISTSERV address. Training and support is available upon request.

### **Employee Information System**

EIS is an Orange County Department of Education system that gives all OUSD employees access to payroll pay stubs and Time and Attendance information. Employees have anytime anywhere access to the system.

### **Video Conferencing**

OUSD has standardized the PolyCom Video Conferencing Units for Video Conferencing. The District Office, Canyon High School, El Modena, Orange High School, McPherson Magnet K-8 and Villa Park High School have the large PolyCom Video Conferencing Units installed. OUSD regularly participates in the video conferences offered through Orange County Department of Education. OUSD will continue to grow and expand in the use of video conferencing.

## **District/School Management Systems**

### **Student Information System**

Aeries is a Client/Server student application that uses the Microsoft SQL 2007 relational database management system to maintain student and other related data for schools including course file information, master scheduling, teacher data, student demographics, grades, attendance, medical, testing, discipline, special education, home language, grades, college entrance requirements, student class schedule, sibling, assessment, counseling, etc. The Aeries Browser Interface (ABI) allows for real-time access to student data from any web browser. ABI is used by teachers to update attendance and grades and view student information and test scores. ABI is also made accessible to parents and students through the Parent Portal and Student Portal for viewing attendance, grades, progress, information, and test scores.

### **Business System**

QSS/OASIS, the district's business system package, was approved by the OUSD Board of Education on February 8, 2001. It includes modules for financial, personnel, credentials, applicant tracking, position control, benefits management, general ledger, accounts payable, budget development, financial companion, purchasing, and warehouse. The system was installed by June 2001 in order to meet the growing needs of the district and to comply with the California's Standardized Account Code Structure (SACS). As part of this migration effort, the District also adopted the state-mandated Standardized Account Code Structure. Support Services opened the 2001-2002 fiscal year using SACS account codes. The QSS/OASIS system is being migrated from an HP3000 based system to a Linux distributed server system. The Payroll System is provided by Orange County Department of Education.

### **California Longitudinal Pupil Achievement Data System (CALPADS)**

CALPADS is a longitudinal data system used to maintain individual-level data including student demographics, course data, discipline, assessments, staff assignments, and other data for state and federal reporting. CALPADS facilitates the exchange and transfer of student information electronically for state reporting to the California Department of Education and to districts and public postsecondary institutions. The CALPADS office is committed to assuring the privacy and confidentiality of student records. OUSD successfully submits the required Fall Data Submission through CALPADS. Spring Language Census (R30) reports are also submitted through CALPADS. CALPADS continues to be an important part in the IS Department.

### **California School Information Services (CSIS)**

UC ELC (eligibility in the local context) reports are submitted through CSIS. CSIS continues to be an important part in the IS Department.

### **Sub Finder**

The Human Resources department uses an automated teacher substitute-calling system called Sub Finder from the vendor CRS, Inc. Human Resources and Information Services collaborated and implemented a transition from using the social security number for login to utilizing their QSS employer ID to log into the system. Sub Finder Web Connect allows teachers and subs to log in to Sub Finder using the Internet. Sub Finder is one of the district's most critical systems.

### **PCS System for Nutrition Services**

Nutrition Services uses PCS Revenue control system for free/reduced applications, point of sale system at the schools, and inventory system. A program called Lunch Cruncher is used for the meal consolidation and Nutrikids for nutrient analysis. Parents have access to purchase lunch tickets online through Pam's lunchroom.

School site workstations are being upgraded to Windows in order to run the latest version of the program. The upgrading of its PCS system is nearly complete at all school sites. Application support is provided by the PCS vendor. Information Services and Nutrition Services have a dedicated position that provides technical PCS support to Nutrition Services. Nutrition Services has updated their network and connect to the District Office through the MOT 100 Mbps fiber connection.

### **SEIS**

The Special Education Information System is an online system for teachers with students with special needs. This provides teachers with an online IEP for students with special needs. This system is available to teachers at school and home.

### **TransTraks**

TransTraks is the Student Transportation Management System that is used by the OUSD Transportation department. The system is used to track bus maintenance, driver training and field and athletic trips. TransTraks also provides computerized routing and mapping.

## **Learning Resources**

### **Reading Counts and Accelerated Reader**

All OUSD schools are utilizing Accelerated Reader or Scholastic Reading counts to encourage students to read more books inside and outside of the classroom. The programs have a diagnostic component that assesses the student's current reading level and recommends books at that level. Students read the books then take a quiz on the book. Students are reassessed at different times of the school year. This assessment can assist the student, teacher and parent of the student's reading progress throughout the school year.

### **Student/Teacher Folders**

Students and Teachers have access to a folder secured for their individual documents and projects hosted on the school's server. There is a drop box for each teacher, which allows students to electronically send documents or projects to the teachers drop box. Teachers have an out box, which allows the teacher to put documents or projects in a folder digitally so that students can retrieve the documents or projects electronically. There is also a shared folder for collaborative projects, which can be shared by students or teachers. Student and Teacher Folders are available at all schools but not available outside the school. Students and Teachers are beginning to use the Content Collection of Blackboard to store documents because of the ability to access the information anywhere and anytime.

### **READ 180**

READ 180 is a research-based reading intervention program designed to raise the reading levels and test scores of struggling readers in Grades 4 and up. READ 180 addresses individual needs through adaptive and instructional software, high-interest literature and teacher-led instruction. READ 180 uses the Scholastic Reading Inventory to assess beginning levels and measure growth. It is currently installed at thirteen schools.

### **Fast ForWord**

Fast ForWord Language software is a series of computer-delivered exercises for students who are struggling with reading and need to develop the cognitive skills necessary for successful reading and learning. The Fast ForWord program is being used at Canyon Hills.

### **Inspiration and Kidspiration**

A visual learning tool, Inspiration assists students in grades 4<sup>th</sup> -12<sup>th</sup> to strengthen critical thinking, comprehension and writing skills across the curriculum. Students build graphic organizers to represent concepts and relationships and use the integrated outlining capability to further organize ideas for reports. Kidspiration<sup>®</sup> provides an easy way to apply the proven principles of visual learning to students K-3. Many of OUSD schools use both programs.

## **Web-Based Instructional Applications hosted at the District Office**

### **Blackboard**

This e-learning software suite powers a total "e-Education Infrastructure" and delivers the promise of the Internet for online teaching and learning in a secure private environment. Blackboard provides students and teachers with the ability to have a virtual private classroom available anytime and anywhere. OUSD provides a Blackboard site for every classroom and course that is taught in OUSD. This environment is safe and secure. Only students and their parents who are enrolled in the teacher's class can have access to



this virtual classroom. Within this virtual classroom, the teacher has access to a variety of online educational tools. Teachers can post announcements, list course documents, provide daily assignments, make available a calendar of events or schedules, post technology rich learning modules with digital video clips, online testing and surveys, online daily grades and more. Student will experience asynchronous learning through a challenging discussion board or participate in learning using synchronous virtual chat with a guest speaker using a virtual white board. Blackboard, a virtual private classroom, is available to all teachers and schools. Blackboard is also being used for staff development.

The following Blackboard Building Blocks have been added to assist students with different needs:

- Softchalk: Teachers can design guided readings with a variety of study guide activities.
- Wimba: Teachers can add voice in the announcements, learning units, discussion boards, and emails.
- StudyMate & Respondus: Teachers can develop online study guide activities that are motivating and easier to post online tests (see list in Curriculum section).

### **Illuminate Live!**

Teachers and students engage in e-learning through this live virtual classroom software for online meeting and training with 2-way voice, whiteboard, video and chat. Distance learning is rich with opportunities for real-time discussion and dynamic interaction from lectures and presentations to small group discussions and debates. Teachers are using this program for tutorials, virtual book clubs and presentations. This is a growing technology in OUSD.

### **United Streaming**

OUSD is a member of Educational Consortium of KOCE, an instructional TV channel which provides schools with Streaming Audio and Digital Video to the classroom to enhance instruction. This streaming Audio and Videos is accessible to teachers and students from home. The services offered by KOCE are Discovery United Streaming. The services provide students and teachers with over 7,000 digital video and 75,000 pictures accessible online. Students and teachers can log in to the programs from the OUSD web page and select their topic to get available digital video and pictures. This is a nonlinear system so teachers can access the exact part of the digital video they want to use in the classroom and not have to use all the other footage. Teachers and students can stream the video in real-time, download to their desktop or press to a CD. The video can be posted on the Blackboard sites, placed in PowerPoint presentations, or saved on the desktop or CD for future use. Digital Video staff development is also available.

### **PLATO**

Plato is a web based intervention program for high school teachers to use to assist students needing assistance in the core curriculum. The program is used for credit recovery and to review students on math and language arts skills to assist the students in meeting the requirements of the CAHSEE.

### **EBSCO**

EBSCO PUBLISHING is the subscription service providing online databases. EBSCO provides over 5500 full text journals and magazines online, 86,000 biographies, over 100,000 primary source documents, 390 national newspapers online and over 400 reference books and encyclopedias and are updated daily. EBSCO provides specialized databases for Advanced Placements Classes. These resources are available at school and from home.

### **SIRS**

SIRS Discoverer and Researcher is an award-winning general reference resource for beginning learners to advanced research for AP classes in grades 7-12. Discoverer for grades 7-9 helps students develop their research, writing, language, and computer skills. Only the best, most unique and most relevant resources are selected for SIRS Discoverer.

### **Destination Math**

The Destination Math series is a carefully sequenced, comprehensive math curriculum that demonstrates how mathematical issues arise out of real-life situations. Destination Math Mastering Skills and Concepts courses are correlated to state standards and offer full online teacher support. The program is available to students at school and home. Destination Math also is correlated to DataDirector

### **ST Math**

ST Math is part of the MIND Research Institute. This is an online math program available at school and home that engages the learner's spatial temporal reasoning abilities to explain, understand, and solve multi-step problems. The online program is language independent software lessons that reduces the language barrier to learning math and is aligned to state standards.

### **Virtual Training**

Virtual Training is available online through the OUSD Web Site to OUSD Students, Teachers, Classified Staff and Administrators anytime and anywhere. Virtual Training provides comprehensive online training/tutorials on over 100 technology applications like MS Office, PowerPoint, Photoshop, Flash, etc. The trainings can be an introduction to a new software application or as a problem solving quick answer to refresh how a task is done in a certain application. An example might be how to create columns in MS Word.

### **DataDirector**

DataDirector offers an integrated approach to manage and use data to drive instructional practices, improve student achievement, and optimize learning results. DataDirector supports a standards-based instructional approach that delivers user-friendly data directly to the desktop of the teacher through a web-based design. Teachers have access to DataDirector at school and home. DataDirector provides powerful analysis capabilities that allow educators to target improvement efforts and personalize student interventions or supplemental learning opportunities. Customized tests can be developed by the district and individual teacher to measure student growth.

### **Library Follett Destiny Automation System**

This is a web-based Library Management system. It automates library circulation, inventory and produces reports instantaneously. The Library automation system equipment and software were purchased from CPSLA funds (CA Public School Library Act of 1998 and site funds). All libraries are fully automated including circulation and cataloging of library books and textbooks. Students use Destiny's online catalog to search for library materials. All schools will be connected to the Follett Destiny Library System at the district office. Follett's Destiny Library System is a centralized database for all the library holdings in the district. Students and parents are able to search school online catalogs from home.

Every school site has search stations for student use. Student search stations range from 1 to 40 at the sites. Most elementary schools have 2 to 4 student search stations. Middle schools have from 8 to 22 search stations, and high schools have between 15 and 40 student search stations.

## **Technology Support**

### **Computer Repairs**

All new equipment is purchased with a minimum three-year onsite/warranty for desktops and laptops. Older systems in need of repair are sent to Information Services where one full-time repair technician manages the work flow. The cost for parts is funded by sites. Labor costs are typically absorbed unless the unit needs outsourcing.

### **Altiris Deployment Solution**

Deployment Solution™ is a complete system deployment solution that clones, deploys, installs, configures, backs up, restores, updates and manages changes on administrative handhelds, desktop and mobile computers, as well as servers. This solution is used by district technicians.

### **IS/Ed Tech Helpdesk Solution**

Altiris Helpdesk is a work order system that allows District staff to process, identify, report, and solve system (software, hardware, and application) problems. As a result, the Helpdesk system helps increase productivity by routing work orders to appropriate staff. End users are provided with status information on their work items via email notification. Site technicians also receive helpdesk requests for their site to help prioritize technical needs. Classified and certificated staffs have access to enter helpdesk requests.

### **Maintenance & Operation Work Order System**

Information Services converted the Maintenance and Operation Work Order System from the AS400 to the Customized SQL program. The Work Order system has a graphical interface and is easy to use. All past records and work orders were converted to the new system.

### **Inventory Solution and Software License Management**

Inventory Solution from Altiris empowers Information Services to manage hardware and software in the District's administrative LAN, WAN, and dial-up environments from a Web-based program. Through Inventory Solution, Information Services has the flexibility and functionality to track software, licenses, hardware, and user inventory.

### **IS and EdTech Departments Technical Support**

The IS and ET Departments supports twenty-one full-time employees (FTEs) including 1 Information Services Specialists funded through Special Programs that support the district office and school sites. Each site has an Instructional Technology Coaches (ITC) to support teachers with technology issues. The ITCs meet monthly with the Ed Tech Coordinator for training and support.

The district's network (Internet, district applications, and Email) and security (firewall) are supported by a Network Systems Manager. The site networks, security cameras and IP phones are supported by one Information Services Specialist. Phone support and Altiris helpdesk requests are supported by all personnel in the department. Aeries and QSS support are also available through phone support, Altiris helpdesk and on site support as needed.

The district supports two training facilities at the district office. The training lab located in the IMC has 24 workstations. The training lab located in the EOC in the IMC building has 10 workstations. Schools and departments can reserve this lab for trainings as well as for trainings that the district sponsors.

**5b. Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the districts teachers, students, and administrators to support the activities in the curriculum and Professional Development Component**

The technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed are listed under each category.

**Hardware**

The areas of need in hardware include desktop and laptop computers, switches, video conferencing, Smart Boards, Response Systems, student and business system upgrades, handheld devices and wireless expansion. There is a continuing need to evaluate the status of desktop and laptop computers at each school site. When funds become available, the current district standards posted on the OUSD Portal are used for ordering.

Video conferencing units which are currently installed at six sites need to be expanded to additional school sites. Smart Boards and Response Systems need to be expanded when funds are available. The current wireless networks at all District sites need to be expanded and updated. PDA access for Aeries also needs to be expanded to allow attendance and gradebook. The QSS/OASIS business system is currently based on an HP3000. This system will be migrated to a distributed system using the Linux operating system.

**Electronic Learning Resources**

As technologies and needs change, all online databases and streaming video services need to be reviewed to ensure they are aligned with curricular and professional development goals.

**Networking and Telecommunications Infrastructure**

Networking and telecommunication needs include WAN/Internet connections and VOIP hardware and licensing. Elementary schools will need to be upgraded from 3 Mbps to 10 – 100 Mbps.

VOIP phones are currently installed at most sites and InformaCast IP Intercom is installed at sixteen sites. This technology utilizes the increased bandwidth and in the current environment requires an additional T-1 for fault tolerance. As funds become available or as older equipment fails, new sites are added.

**Physical Plant Modifications**

Needs in this area include review of modernization plans and the review of cabling needs at each site. During modernization, IS and EdTech staff need to meet with the Facilities and Planning department to ensure that the current plans meet the needs of the current and emerging technologies. Staff also needs to review the cabling infrastructure at the sites to determine if upgrades or changes are needed. Currently all district sites are cabled and are working effectively.

## **Technical Support**

The effectiveness and responsiveness of the support to the curriculum and professional development goals needs to be evaluated. Changes or additional staff recommendations if required need to be made to improve the service level to the district.

### **5c. List of clear annual benchmarks for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components in section 5**

#### **Benchmarks:**

##### ***Hardware:***

- Quarterly evaluate and update district standards for ordering desktops and laptops and post on the district web site
- Quarterly replacement desktop and laptop needs will be determined and purchased when funds are available at each site as measured by CTAP Technology Site Inventories.
- By December, 2011 the updated wireless design will be installed at one Elementary School if the E-Rate funding for this project is approved.
- By August 2012, fiber will be installed for the remaining elementary sites to upgrade their Internet connections providing each site with 10 - 100 Mbps
- By July 2012, desktop video conferencing Units will be piloted at several sites to support curricular projects and measured by site tech inventory
- By December, 2011, all elementary schools will have a minimum of one Smart Board and one document camera installed as measured by site tech inventory
- By July 2013, QSS business system will be moved from an HP 3000 to a distributed Linux system providing staff with a more robust and flexible system
- By July 2013 Wireless PDA will be used by PE Teachers to record attendance online and access the ABI online gradebook to support their curricular and professional development goals.
- By July 2011 many Aeries Student System applications will be moved from a client server based system to a web based system to provide better support and performance for the teachers and administrators

##### ***Electronic Learning Resources:***

- Annually all online databases and streaming video services will be reviewed and evaluated to ensure that the online databases and streaming videos that are purchased are aligned with curricular and professional development goals.
- By 2011 additional streaming videos will be reviewed to broaden the number of videos available to support the curricular and professional development goals.

##### ***Networking/Telecommunications Infrastructure:***

- By August 2012 all schools will have upgraded fiber connections at a speed of 10 to 100 Mbps to better support services for the curricular and professional development goals
- By July 2012 one site will have a newly designed wireless network capable of supporting multiple wireless devices per student to better support services for the curricular and professional development goals
- Annually review phone/intercom systems that need to be replaced and seek out funds for replacement of systems to VOIP/intercom system

**Physical Plant modifications:**

- Quarterly IS and ET staff will meet with Facilities and Planning staff to update modernization plans to meet the needs of new emerging technologies.
- Annually review and update cabling needs at sites and plan for needed upgrades. Currently all sites are cabled and working effectively.

**Technology Support:**

- Review and evaluate the need for additional tech support at the district office and make recommendations to add additional staff if needed to support the curriculum and Professional Development goals

**5d. Describe the process that will be used to monitor the annual benchmarks including roles and responsibilities.**

Evaluation Instrument(s): Data To Be Collected	Evaluation Schedule	Program Analysis/ Modification Process	Funding Resources
Department reports; helpdesks requests; Librarians Reviews of online services and usage reports: Usage reports; Edtech Profile Site Technology Inventories	Quarterly	Each Department will evaluate reports and progress toward goals and recommend modifications/adjustments to the Technology Committee The ET Director, Network Manager, M/O Manager, and Facilities/Planning Director will collect the needed data to be presented to the OUSD Technology Committee.	Categorical Funds, Lottery, SLIP, Site Funds, Grants, E-rate, Deferred Maintenance Funds, Modernization Funds, Title II, Title V, EETT/ARRA formula and competitive grant, Information Services, Educational Technology, Facilities/Planning and Support Operations budgets

## 6. Funding and Budget

**6a. List established and potential funding sources.**

Most of the goals and objectives that provide the foundation of this plan are being funded from existing sources or from anticipated funding connected to categorical programs and other restricted budgets. Details covering these anticipated expenses appear with the individual goals and objectives in the Curriculum, Professional Development and Infrastructure components in the table defining Funding Resources.

In addition, the District will aggressively pursue grant opportunities that offer additional resources for technology purchases, technology staff development and evaluation components related to technology. These will include grant entitlements requiring specific applications for eligibility, competitive proposals to state and federal funding sources, and local applications to non-profit and philanthropic education supporters. Proposals also allow OUSD to extend existing human capital through additional training opportunities, as well as those that match dollars for hardware and software purchases will also be researched and pursued as appropriate. This budget is based on the projected 2011-2012 budget. Funds from General Fund, Supplementary Grant, SLIP, Title II, Information Services, Educational Technology, Modernization, Deferred Maintenance, Lottery, Teacher Quality, Site Funds, Title V, Voc-Ed, EETT

formula and competitive grant and other categorical funds are included in this budget that supports the Technology Plan.

**6b. Estimate annual implementation costs for the term of the plan.**

BUDGET CODE	YEAR 1	YEAR 2	YEAR 3	DESCRIPTION
1000 Certificated Employees	\$195,480 \$15,500 \$5,000 \$22,000	\$195,480 \$15,500 \$5,000 \$22,000	\$195,480 \$15,500 \$5,000 \$22,000	Salary for Certificated Staff assigned to Technology Stipends for Teacher Tech Trainers(ITC) Sub days for Technology Training Extra Earnings for Teachers
2000 Classified Employees	\$947,332 \$5,000	\$947,322 \$5,000	\$947,322 \$5,000	Salaries for Classified Staff assigned to Technology Extra Earnings for Technology Staff
3000 Employee Benefits	\$488,351	\$488,351	\$488,351	Certificated and Classified Benefits, Health and Welfare, PERS
4000 Materials and Supplies	\$83,000 \$756,000 \$200,000 \$20,000 \$20,000	\$72,000 \$625,000 \$150,000 \$20,000 \$25,000	\$50,000 \$510,000 \$75,000 \$20,000 \$30,000	Estimate of new software purchases Desktops, Laptops, and Printer Purchases Cisco Routers, Switches ,VOIP phones and Upgrade Security Camera Servers
5000 Other Services and Operating Expenses	\$11,000 \$500 \$15,000 \$205,000  \$448,114  \$600,000 \$32,181	\$11,000 \$500 \$15,000 \$205,000  \$448,114  \$600,000 \$32,000	\$11,000 \$500 \$15,000 \$205,000  \$448,114  \$600,000 \$32,000	Mileage and Cell Phones for Tech Support Conferences Repairs (equipment has 5 year contract) DataDirector Data System (reoccurs annually)  Software Support and Maintenance like Aeries, QSS, ,Blackboard Destiny, Online Database (EBSCO, SIRS) United Streaming*see list of services  Cell Phones Voice Phones/ Data lines for Internet Access (ERATE and CTF reimburse 80%) Xerox Machine Lease
<b>TOTAL</b>	<b>\$4,069,458</b>	<b>\$3,882,267</b>	<b>\$3,675,267</b>	
				* iBoss, eTrust, Cisco Equipment Maintenance, HP3000 Maintenance, AS400 Maintenance, Printer Maintenance, Altiris Support, SoftChalk, Wimba, Eluminate, StudyMate, Respondus, , Virtual Training, Sub Finder, SEIS

**6c. Describe the district's replacement policy for obsolete equipment.**

OUSD purchases desktop computers with a 5-year on site warranty and a 3-year on site warranty for laptops. The extended warranties offer better support for district schools in a timely matter. Computer repair at the district office is described on page 51. Technology support is described on pages 51-52. For machines over 5 years old, the district policy is to recommend replacement. Currently there is no budget for computer replacement, however, each site and department purchases replacements and new computers as the site budgets and grants allow. Many schools have lease-purchase agreements for five years for their computers. After five years, the lease expires and the school acquires new lease-purchase agreements, thus ensuring that their equipment is up-to-date.

**6d. Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.**

The monitoring process is described in detail in a chart below the Goals, Objectives and Benchmarks in the Curriculum, Professional Development and Infrastructure components in the Technology Plan. The ET Director, Network Manager and the Technology Committee will oversee all monitoring efforts.

## **7. Monitoring and Evaluation**

**7a. Describe the process for evaluating the plan's overall progress and impact on teaching and learning.**

Monitoring and evaluation of the following components of this plan will be the responsibility of the Director of Educational Technology and Educational Technology Coordinator along with the Assistant Superintendent of Ed Services, and site administrators. They will meet regularly to share data related to progress toward goals, and at least annually. The Educational Technology Coordinator will chair the Technology Committee meetings. The Technology Committee will be an advisory committee. The Committee will be composed of 2 Elementary Principals, a High School Principal, a Middle School Principal, 2 Elementary Teachers, 2 Middle Teachers, 2 High School Teachers, 2 Librarians, Director of Educational Technology, M/O Manager D, Network Systems Manager, and a Curriculum Coordinator designee. The Technology Committee will be responsible for the ongoing task of reviewing, advising, and suggesting modifications on the implementation of the OUSD Technology Plan. The Technology Committee will meet quarterly and serve as representatives of their individual groups. Those responsible for meeting or delivering planned benchmarks will develop measurable data for the following elements of the overall plan on the timeline below:

**7b. Schedule for evaluating the effect of plan implementation**

Monitoring sessions will be held quarterly in conjunction with meetings of the Technology Committee. A compilation of data will be presented in an annual report of progress. The process that will be used to monitor overall success will be formal data analysis of the major outcome areas using surveys, site records, test results, usage reports and other relevant data that relate to:

### **Curriculum**

CSA data, API targets, District Benchmark Assessments (PSA) and other site and classroom measurements will be analyzed to identify sites and classrooms where integration of various technologies is improving school results. Best practices will be disseminated through a dedicated Blackboard space and web page links in addition to staff development activities. Under the direction of the Education Services Division and in conjunction with site administrators and teachers, the Ed Tech Director will intervene where technology is not improving measurable results and identify and remedy technology issues that can be addressed. Working with OUSD's Assessment Coordinator, student test data will be analyzed by content area and grade level to identify effective software support that is contributing to achievement, specifically Read 180, Reading Counts and other software, and make that information available to all staff through established channels.

### **Professional Development**

Teacher technology proficiency information will be gathered through tools identified in prior sections including Edtech Profile. This data will be disaggregated by grade level and other demographic details to



ensure that staff development opportunities are relevant and effective to OUSD teachers. Overall proficiency level changes will be monitored to ensure that teachers are progressing on the Edtech Profile levels and in individual application and integration. Under the guidance of the Assessment Coordinator, teacher proficiency levels will be cross referenced with student test scores to identify classroom practices and strategies to improve best practices district wide.

### **Student Technology Skills and Digital Literacy**

The rubrics for tech skills and information literacy that will be developed under this plan will both guide the integration of technology skills into curriculum and define its assessment by grade level. These measurements, combined with site reports and the increased access to technology that is planned for each classroom, are expected to show that students are learning discrete technology skills as a seamless component of content-area learning. Interventions will be addressed as data and reports suggest, by the refinement or modification of staff development and support.

<b>Major Plan Focus Area</b>	<b>Data Elements</b>	<b>Submission Dates</b>	<b>Responsibility</b>
<b>Curriculum/Student Achievement</b>	STAR, school-wide API targets, local standards-based assessment (PSA), retention rates	Semester	Educational Services
<b>Professional Development</b>	Edtech Profile surveys, annual teacher survey, technology rep reports, GoSignMeUp usage and transcript	Semester, annual survey	Ed Tech Coordinator Staff and Principals
<b>Student Technology Skills/Digital Literacy</b>	Annual survey, course completion records, graduation requirements, site surveys	Annual	Principals, Curriculum Coordinators, ET Coordinator
<b>Equity of Access</b>	Site inventories and purchasing/installation records	Annual	Principals, Technology Staff, and M/O Manager
<b>Infrastructure</b>	operational school network connections	Annual	Principals, Technology Staff, and M/O Manager

### **7c. Describe the process and frequency of communicating evaluation results to tech plan stakeholders.**

The Technology Committee meets quarterly. All collected data will be presented to the Technology Committee and evaluations against the Curriculum and Professional Development goals. Results and recommended modifications will be shared with all stakeholders. Annual roundtable discussions with stakeholders will be held for input and to share recommended modifications.

## **8. Adult Literacy Providers**

### **8a. Effective collaborative strategies with Adult Literacy providers to maximize the use of technology**

This technology plan incorporates multiple strategies that use technology to support student success, including programs that support adult literacy. The District, in addition to community-based providers for

adult learning, offers adult English language learners opportunities to acquire a High School Diploma or General Educational Development (GED) certificate for a high school graduation equivalency.

The district has a long history of collaboration with and/or referrals to other locally based adult education programs. The District partners with the Central County Regional Occupation Program (CCROP) that includes shared instructors and classrooms. The CCROP places particular emphasis on adult literacy and skill building for industry certification in technology-based job preparation. Content-based instruction focuses on addressing State content standards in language arts and mathematics using computer applications. Instructional methodology is based upon achieving real world outcomes that are determined to be necessary for industry demanded skills.

District staff members frequently refer young and older adults to other adult literacy programs within central Orange County and other funded programs through resources other than District funds. Santiago Canyon College's (SCC) Division on Continuing Education, which is part of the Rancho Santiago Community College District (RSCCD), provides free education programs, with a child development center on-site. These programs include adult education for students to make up credits toward a high school diploma and English Language programs that are technology based and individualized with the help of technology.

RSCC's Interactive Language Training Center provides teacher-directed, independent study using computer software to practice English skills, conversation, citizenship preparation, pronunciation, grammar, reading, writing and math. The College' "High School Program" includes Adult Basic Education (basic skills in reading, writing, grammar, vocabulary, spelling, and mathematics), Individualized Instruction in Reading, Citizenship Classes, GED Test Preparation, and high school subjects. Santiago Community College also offers a wide variety of adult education programs that are technology-based.

The nearby California State University, Fullerton, offers adult extension courses that include English as a second language courses (Specially Designed Academic Instruction in English [SDAIE]) and GED preparation programs for adults. Many instructors of these courses use technology-based tools to assist student learning.

The District's Technology Plan takes into consideration the fact that there are many adult literacy providers providing adult literacy programs within the District's attendance area and that community adults are regularly referred to those programs. In doing so, the District assists adults within OUSD's attendance areas to support the needs of students, utilizing research-based curricula and technology wherever and whenever possible. Further collaboration with these existing programs will continue to maximize funding resources and the use of technology.

## **9. Effective research-based methods, strategies and criteria**

---

**9a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.**

This plan is both policy-driven and curriculum aligned, with a major focus on the changes anticipated not only in technology generally, but also in how it will be used to improve instruction in OUSD in the future. A major study completed in Washington DC in 2002 sums up the relevant guiding principals providing the foundation for this Technology Plan. The work by Levin, D, & Arafteh, S. (2002) *The digital disconnect: The widening gap between internet-savvy students and their schools* American Institutes for Research for Pew Internet & American Life Project. Washington, DC. shows that school leaders can meet the challenges of Internet integration through policies that assure:

- adequate numbers of Internet-accessible computers are available for student use
- technical assistance is available to teachers
- all teachers are trained to use the Internet and to integrate the Internet with instruction.
- all students are taught computer skills, including how to use the Internet
- students have convenient and frequent access to the Internet at school
- students are being engagingly challenged to use the Internet in their assignment.

As the goals in sections 3 and 4 attest, and with the broad professional development opportunities and strong elements of infrastructure and resource support, these are the policies in place in OUSD. Technology is most effective as a tool to enhance teaching and student achievement when it is integrated into the existing curriculum (Center for Applied Research in Education Technology, 2005). This means avoiding the addition of technology as an isolated topic or afterthought, instead weaving technological applications and knowledge into the skills and content already taught according to state and district standards. Quantitative studies have shown, for example, that streaming digital video had a positive effect on student achievement where video was used to supplement mathematics instruction in Los Angeles Unified School District (Boster, et. al. 2004). Eureka City Schools also had success in their Environmental and Spatial Technology (EAST) program, which connected students to their community and to academic content standards already in place (National Education Technology Plan: Eureka City Schools East Program).

As noted in Section 3, the elementary, middle, and high school curricula have set standards for student learning in technology-based skills and have integrated technology into developing higher thinking skills in traditional academic study. We believe that integration of technology is key to helping students become twenty-first century learners, imparting the knowledge base and concrete skills that are in demand in an increasingly technology-dependent marketplace. Furthermore, making technology part of the District's already outstanding curriculum as a tool to improve student learning (not just an end in itself), allows teachers to foster the creativity, critical thinking, and resourcefulness that their students will need to adapt to a changing world.

The vision of technology implementation presented in this plan strives for the integration and use of technology to improve teaching and learning throughout the curriculum. The goals, strategies and methods used are based on current, relevant research related to technology integration, professional development, and improving student achievement. The research conducted by the Idaho Council for Technology in Learning (1999) overwhelmingly demonstrates the positive relationship between technology and academic performance in the core curriculum areas of language arts, math and reading. In this study, students who experienced a high exposure to computers over a four-year period showed higher academic gains in these core curriculum areas, than those students who had little interaction with computers over the same time period. Not only does this plan increase the ratio of computers to students, and dramatically expand the online course options for high school students, it also utilizes a content

management system, Blackboard, which is integrating technology into every classroom and changing the ways teachers communicate to students, parents and each other. It is a serendipitous marriage.

The student-centered projects such as those required in 3e, Goal 2 and related objectives reflect the research showing that the development of a broad, overall conceptual understanding of subject matter is enhanced with the integration of technology. Students who "formulate and represent their own understanding by manipulating and connecting concepts and relationships in order to construct a model, instead of just telling about the concept " show higher levels of understanding and increased achievement that is qualitatively different from the learning typically associated with simple classroom presentations of learned concepts ([Bozeman, 1999, pp. 233-240](#)). This is further supported with a study that referenced articles examining the use of computer technology in a broad range of contexts. This study determined that "students learn quickly and well in environments characterized as "constructive, collaborative, interactive, contextualized process". (Roschelle, J. M., Pea, R. D., Hoadley, C. M., Gordin, D. N., & Means, B. M. (2000). *Changing how and what children learn in school with computer-based technology: Children and Computer Technology*, 10(2), 76–101.)

Of significance in the analysis of research is the study by Lowes (Dr. Susan Lowes, Director, Research and Evaluation Institute for Learning Technologies, Teachers College/Columbia University: *ONLINE TEACHING AND CLASSROOM CHANGE: THE IMPACT OF VIRTUAL HIGH SCHOOL ON ITS TEACHERS AND THEIR SCHOOLS* 2005) that suggests that professional development for online teaching may also have an effect on *classroom* teaching. For any one teacher, the face-to-face and online classrooms are not two separate worlds but one social space. This study suggests that online teachers make changes in their face-to-face classroom practice, and can in fact; bring closer curriculum alignment and improved practice school-wide, including face-to-face classes, as a result of the online experiences and environment.

There is a growing body of literature on the characteristics of successful online courses and on how to bring good pedagogy to the online environment, and the work cited in the Lowes study shows teachers how to apply this knowledge to the online courses they will be teaching (Haavind 2000; Haavind and Rose et al. 2002; Hsi 1999; McIntyre and Elbaum 2000; Pape, Adams, and Ribiero 2005). These are the basis for the professional development to be provided to OUSD online staff. The pedagogical approach emphasizes student-centered teaching; collaborative, problem-based learning; small-group work; and authentic performance-based assessment. Its courses are developed using Grant Wiggins and Jay McTighe's "backward design" approach (Wiggins and McTighe 1998). This type of pedagogy is more familiar to elementary and middle-school teachers than to high school teachers, so for many teachers, TLC and NIM are their first introduction to this approach to teaching. It has major implications for improving instructional delivery at the secondary level and provides the foundation for the professional development being planned for high school staff.

A recent report released by the National Education Association and the American Federation of Teachers asserts that, even in districts where technology is prevalent, "many teachers don't feel adequately prepared to use technology to enhance their lessons." This 2008 study, titled "Access, Adequacy, and Equity in Education Technology," shows that "most educators use technology for administrative tasks, but substantially fewer use it for instruction;" in fact, only 46 percent of 1,934 public school educators surveyed believe they were adequately trained to integrate technology into their instruction.

In formulating the objectives of the Technology Plan, our focus is especially on the following recommended goals based on the NEA/AFT mentioned above:

1. To improve students' and educators' access to technology in the classroom (or primary work place), as well as outside of the school, by providing more wireless and portable technology.
2. To increase educators' and students' access to high-speed Internet services and more appropriate instructional software. In addition, to increase access to technical assistance and maintenance support for using technology.
3. To expand professional development in technology by providing more appropriate training for educators to use technology. In addition, to integrate technology deeper into the school curriculum by establishing standards for student usage, and to capitalize on the positive perceptions and enthusiasm that educators have for education technology to help increase student achievement.

The goals of the professional development component of the plan to meet the objectives detailed in section 4 focus on the primary strategy of preparing teachers to integrate technology and information literacy as part of the core curriculum. The paper by Heath and Ravitz (2000) confirms OUSD's direction for professional development; "Supporting research (Brand 1998: Education Week, 1999) shows that technology curriculum-integration rather than technology skills training should be the primary focus of technology-centered staff development." Planned professional development activities will give teachers additional opportunities for integrating technology within learner-centered instruction. A variety of teacher-centered options assure effective staff development based on studies from the research banks of CARET. Among the strategies in place are commitments to long-term learning, on-site guidance, peer collaboration, and involvement of teachers in planning their own learning of technology integration.

OUSD will offer trainings both face to face and online, through Blackboard Building Blocks, including the components of online learning for students – i.e. SoftChalk, Web 2.0 tools such as blogs, wikis, and podcasts, StudyMate, WIMBA, and more, during full day trainings on designated staff development days, Summer Technology Academy, after school sessions, Virtual Training and tutorials/handouts posted on Blackboard, and Online Professional Development classes conducted through EdTech Professional Development Blackboard site.

In a review of research on staff development for technology, [\(Cradler & Cradler, 1995\)](#) found significant factors in effective staff development to be:

- Development of school and classroom level technology plans by and for teachers.
- Understanding of ways to integrate technology into education reform.
- Teacher-awareness of effective technology applications.
- A social network of other technology-using teachers.
- Availability of teacher-mentors or other peer support.
- Involvement of principals and other administrators in the planning and training.
- Development of the knowledge to critique and select technology applications.
- Adequate time and increased opportunity for staff development and technical assistance.
- Awareness of and access to educationally relevant technology-based programs.
- Opportunities for educators to communicate with peers in other schools and at conferences.

These are basic to the professional development underway and planned forward through June 30, 2014 as reflected in the implementation plans found in section four.

**9b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.**

Online education, where instruction and content are delivered through the Internet, has ushered in the digital era of anytime, anywhere learning. Through online learning, students are no longer bound by the obstacles of time and place to broaden and enhance their educational experience. Orange Unified has been on the frontier of this voyage since it began, and it continues to push the envelope in this Technology Plan. Specifically, the objective in section 3 related to online learning is an ambitious one that reflects OUSD's current position as a statewide leader in online coursework:

*By June 2014, 40% of high school students will participate in at least one Orange Live! online class that fulfills district expectations for academic content rigor and alignment to curricular standards, as evidenced in student transcripts and/or attendance records before their graduation.*

The Orange Live! Program offers the 9<sup>th</sup>-12<sup>th</sup> grade students in OUSD opportunities to complete full credit courses online. OrangeLIVE! courses are taught by OUSD-credentialed teachers, follow the same board-adopted curriculum and textbooks as their traditional counterparts, and are delivered through the Blackboard learning management system. The classes meet state standards, and comply with state reporting and auditing guidelines. In the schools' master schedules, the online classes are scheduled at seventh and eighth periods, but students and teachers are not required to be at school at those times. Students are required to take all tests face-to-face. Teachers publish a weekly pacing guide and students complete the work at their own pace during the week.

The success of any online program hinges on engaging students and applying technology tools they use daily. Information is no longer found in textbooks alone. The Internet is a virtual textbook, one that can produce a new edition every nanosecond. The availability of information is shaping the direction and focus of K-12 education and causing a shift from passing along information to students, to helping students use it to inform their critical thinking and literacy skills. Learning then takes on a social context as well as an academic one, and students are empowered to learn through a structured and, yet personalized, mode of instruction as members of a learning community.

The current direction of the online coursework in OUSD uses a variety of software and technologies to extend and supplement the district's curriculum with the expectation that each class meets or exceeds the rigorous academic standards to be found in face-to-face classrooms. As this program expands over the life of this plan, OUSD expects to see wider acceptance of the online option, burgeoning enrollments, more involved schools, greater enthusiasm to teach within it, high parental acceptance levels, and increasing levels of academic achievement for students.

# 2011-2014 Technology Plan

## Appendices

---

Appendix A:	Technology Standards.....p. 64
Appendix B:	ISTE National Educational Technology Standards for Students.....p. 67
Appendix C:	Criteria for EETT Funded Technology Plan.....p. 68



# Appendix A: Elementary Technology Standards

## 2011-2014

### Recommended Technology Standards for Elementary Schools:

1. One lab of thirty-six computers with headsets and microphone available for sign up (same number of computers as the largest class size)
2. Each classroom will have a ceiling mounted LCD Projector, sound system, Interactive Board, Response Systems and a DVD with wall mounted controls.
3. Automated Library and Textbook system (Destiny) with 4 computer search stations providing Internet access and a networked printer
4. Four computer workstations with Internet access and a networked printer in every K-6 classroom
6. One digital camera and digital camcorder per school
7. One multimedia workstation with editing video capabilities for every 4-6 classroom
8. One portable wireless laptop cart with 36 laptops per grades 4-6
9. Teacher computer workstation (a laptop with lockdown) for all teachers
10. Campus-wide fiber (12 mm/6sm) infrastructure with 12 CAT6 connections per classroom (older infrastructure is 12mm fiber with 8 CAT5E )
11. Campus wide Wireless Access
12. Fiber connection between Elementary School and District Office 100 Mbps
13. VOIP Phones and IP intercoms in all classrooms
14. Network Hardware – Cisco Gbps over fiber and 100 Mbps to the desktop
15. Closed circuit cable TV to all classrooms with the ability to broadcast from each classroom
16. Technology training for all teachers
17. Recommended Software: Scholastic Reading Counts, READ 180, ST Math, Destination Math, Destination Reading, Microsoft Office or Open Office, KidPix, Inspiration, Kidspiration, TimeLiner, Typing Program, Photoshop Elements and Textbook Publishing software
18. Online resources available to all teachers and students: Blackboard, DataDirector, Aeries Browser Interface(ABI), Student Portal, Parent Portal, SIRS Online, Discovery United Streaming, EBSCO Online, Destination Math, Library Online Catalog (Destiny) and Virtual Training
19. Computer Lab and Library opened before, after, and during school hours
20. Technical support during school hours
21. Recommended that all teachers will have an active Blackboard site
22. Recommended that all teachers actively use the Aeries Online Gradebook
23. All Parents will have access to the Parent Portal and Blackboard



### Minimum level of technology access should be available to all OUSD elementary students:

1. One lab of thirty-three networked computers(same number of computer as the largest class size)
2. Television of LCD Projector in every classroom
3. Automated Library and Textbook system (Destiny) with 4 computer search stations providing Internet access and a networked printer
4. One multimedia computer workstation and a printer in every K-6 grade classroom
5. Campus-wide fiber (12mm/6sm) infrastructure with 8 CAT6 connections in every K-6 grade classroom (older infrastructure is 12mm fiber with 8 CAT5E )
6. Network Hardware – Cisco Gbps over fiber and 100 Mbps to all desktop
7. Technology training for all teachers
8. Computer Lab open during school hours
9. Software recommended in the Technology standards should be available in all labs
10. Online resources: Blackboard, Discovery United Streaming, DataDirector, Aeries Browser Interface, SIRS Online, EBSCO Online, Library Online Catalog, and Media Library Online
11. All computers will have Microsoft Office or Open Office

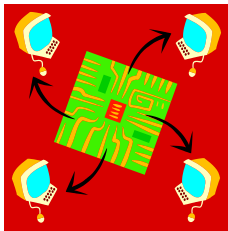


# Middle School Technology Standards

2011- 2014

## Recommended Technology Standards for all OUSD Digital Middle Schools:

1. One lab with forty networked computers with headset and microphone available on a sign up basis
2. One lab with forty networked computers with headsets and microphones for **required** computer classes
3. Each classroom will have a ceiling mounted LCD Projector, sound system, Response Systems, Interactive Board and a DVD/VCR with wall mounted controls
4. Automated Library and Textbook system (Destiny) with 10 computer search stations with Internet access and a networked printer
5. One student computer with Internet access and a printer in each classroom
6. Teacher laptop with lockdown and access to printers for all teachers
7. Campus-wide fiber (12 mm/6sm) infrastructure with 6 CAT6 connections per classroom (older infrastructure is 12mm fiber with 4 CAT5E )
8. Campuswide Wireless Access
9. Fiber connection between Middle School and District Office 100 Mbps
10. VOIP Phones and IP Intercoms in each classrooms
11. Network Hardware – Gbps over fiber and 100 Mbps to the desktop
12. Closed circuit cable TV to all classrooms with the ability to broadcast from each classroom
13. A portable wireless laptop cart with 40 laptops and laser printer per core subject
14. The following software is also purchased: Scholastic Reading Counts, Microsoft Office, Open Office, Inspiration, and READ 180
15. Online Resources: Blackboard, DataDirector, Aeries Browser Interface (ABI), Elluminate, SIRS Online, EBSCO Online, Discovery United Streaming, Plato, Destination Math, and Library Online Catalog,
16. Computer Lab and Library open before, after and during school hours
17. Technical support during school hours
18. Technology training for all teachers
19. Recommended that all teachers will have an active Blackboard site
20. Recommended that all teachers actively use the Aeries Online Gradebook
21. All Parents will have access to the Parent Portal and Blackboard



## Minimum level of technology access should be available to all OUSD middle students:

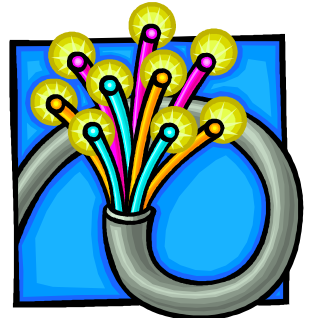
1. Forty networked computer lab for sign up
2. Forty networked computers for **required** computer classes
3. Television or LCD Projector in every classroom
4. Automated Library and Textbook system (Destiny) with 10 computer search stations providing Internet access and a networked printer
5. One student computer workstation with Internet access and a printer in each classroom
6. Teacher laptop/workstation with lockdown and access to printers for each teachers
7. Campus-wide fiber (12 mm/6sm) infrastructure with 4CAT6 connections per classroom (Older infrastructure is 12mm fiber with 4 CAT5E )
8. Network Hardware – Gbps over fiber and 100 Mbps to the desktop
9. Technology training for all teachers
10. Online Resources: Blackboard, Pulliam IDMS, Aeries Browser Interface, Elluminate, SIRS Online, EBSCO Online, Library Online Catalog, and Media Library Online, United Streaming
11. Computer Lab and Library open before, after and during school hours
12. Technical assistance during school hours
13. All computers will have Microsoft Office or Open Office

# HIGH SCHOOL TECHNOLOGY STANDARDS

## 2011-2014

### **Recommended Technology Standards for all OUSD High Schools:**

1. Two labs of forty networked computers with headsets and microphones scheduled on a sign up basis
2. Each classroom will have a ceiling mounted LCD Projector, sound system, Interactive Board, Response System and DVD with wall mounted controls.
3. Automated Library and Textbook system (Destiny) with 10 computer search stations with Internet access and a networked printer
4. One student computer workstation with Internet access and a printer in each classroom
5. Teacher laptop with lockdown and access to printers for all teacher
6. Campus-wide fiber (12 mm/6sm) infrastructure with 6 CAT6 connections per classroom (older infrastructure is 12mm fiber with 4 CAT5E )
7. Campus wide Wireless Access
8. Fiber connection between High School and District Office 100 Mbps
9. VOIP Phones and IP intercoms in each classroom
10. Network Hardware – Cisco Gbps over fiber and 100 Mbps to the desktop
11. Closed circuit cable TV to all classrooms with the ability to broadcast from each classroom
12. The following software is recommended: Scholastic Reading Counts, Read 180 Microsoft Office, Open Office Photoshop, and 3D Studio Max
13. Online Resources: Online Resources: Blackboard, DataDirector, Aeries Browser Interface (ABI), Student Portal, Parent Portal, Elluminate, SIRS Online, EBSCO Online, Library Online Catalog, Destination Math, Plato, and Discovery United Streaming,
14. Computer Lab and Library open before, after and during school hours
15. A video production lab
16. At least one laptop English and History class offered grades 9-12 at each high schools
17. Online Courses will be available to all 9-12 grade students
18. A Portable wireless laptop cart with 40 laptops and a laser printer per core subject
19. Technical support on site during school hours
20. Technology training for all teachers
21. Recommended that all teachers will have an active Blackboard site
22. Recommended that all teachers actively use the Aeries Online Gradebook
23. All Parents will have access to the Parent Portal and Blackboard



### **Minimum level of technology access should be available to all OUSD high school students:**

1. One lab of forty networked computers scheduled on a sign up basis
2. Television or LCD Projector in every classroom
3. Automated Library and Textbook system (Destiny) with 10 computer search stations providing Internet access with a networked printer
4. One student computer workstation with Internet access and a printer in each classroom
5. A laptop with lockdown and access to printers for all teacher
6. Campus-wide fiber (12 mm/6sm) infrastructure with 4 CAT6 connections per classroom (Older infrastructure is 12mm fiber with 4 CAT5E )
7. Network Hardware – Cisco Gbps over fiber and 100 Mbps to the desktop
8. Technology training for all teachers
9. Online Resources: Blackboard, DataDirector, Aeries Browser Interface, Elluminate, SIRS Online, EBSCO Online, Library Online Catalog, Plato, and Discovery United Streaming
10. Computer Lab and Library opened during school hours
11. Technical assistance on site during school hours
12. All computers will have the software Microsoft Office or Open Office loaded

# **National Educational Technology Standards for Students: The Next Generation**

**“What students should know and be able to do to learn effectively and live productively in an increasingly digital world ...”**

## **1. Creativity and Innovation**

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

## **2. Communication and Collaboration**

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

## **3. Research and Information Fluency**

Students apply digital tools to gather, evaluate, and use information. Students:

- plan strategies to guide inquiry.
- locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- process data and report results.

## **4. Critical Thinking, Problem-Solving & Decision-Making**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources. Students:

- identify and define authentic problems and significant questions for investigation.
- plan and manage activities to develop a solution or complete a project.
- collect and analyze data to identify solutions and/or make informed decisions.
- use multiple processes and diverse perspectives to explore alternative solutions.

## **5. Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- advocate and practice safe, legal, and responsible use of information and technology.
- exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- demonstrate personal responsibility for lifelong learning.
- exhibit leadership for digital citizenship.

## **6. Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems and operations. Students:

- understand and use technology systems.
- select and use applications effectively and productively.
- troubleshoot systems and applications.
- transfer current knowledge to learning of new technologies.

## Appendix C – Criteria for EETT Technology Plans

(Completed Appendix C is REQUIRED in a technology plan)

*A technology plan needs to “Adequately Address” each of the following criteria:*

- *EETT Requirements are listed on Appendix D - EETT Technology Plan Requirements*
- *Appendix C must be attached to the technology plan with “Page in District Plan” properly cross-referenced and completed.*

1. PLAN DURATION CRITERION	Page in District Plan	Example of Adequately Addressed	Example of Not Adequately Addressed
The plan should guide the district’s use of education technology for the next three to five years. (For a new plan, can include technology plan development in the first year)	4	The technology plan describes the LEA use of education technology for the next three to five years. (For new plan, description of technology plan development in the first year is acceptable). The plan must include a specific start and end date (7/1/xx to 6/30/xx).	The plan is less than three years or more than five years in length.
2. STAKEHOLDERS CRITERION Corresponding EETT Requirement(s): 7 and 11 (Appendix D).			
Description of how a variety of stakeholders from within the school district and the community-at-large participated in the planning process.	4	The planning team consisted of representatives who will implement the plan. If a variety of stakeholders did not assist with the development of the plan, a description of why they were not involved is included.	Little evidence is included that shows the district actively sought participation from a variety of stakeholders.
3. CURRICULUM COMPONENT CRITERIA Corresponding EETT Requirement(s): 1, 2, 3, 8, 10, and 12 (Appendix D).			
a. Description of teachers’ and students’ current access to technology tools both	5-6	The plan describes the technology access available in the	The plan explains technology access in terms of a student-

<b>during the school day and outside of school hours.</b>		classrooms, library/media centers, or labs for all students and teachers.	to-computer ratio, but does not explain where access is available, who has access, and when various students and teachers can use the technology.
<b>b. Description of the district's current use of hardware and software to support teaching and learning.</b>	<b>6-9</b>	The plan describes the typical frequency and type of use (technology skills/information and literacy integrated into the curriculum).	The plan cites district policy regarding use of technology, but provides no information about its actual use.
<b>c. Summary of the district's curricular goals that are supported by this tech plan.</b>	<b>9</b>	The plan summarizes the district's curricular goals that are supported by the plan and referenced in district document(s).	The plan does not summarize district curricular goals.
<b>d. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to improve teaching and learning by supporting the district curricular goals.</b>	<b>9-12</b>	The plan delineates clear goals, measurable objectives, annual benchmarks, and a clear implementation plan for using technology to support the district's curriculum goals and academic content standards to improve learning.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
<b>e. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire the technology skills and information literacy skills needed to succeed in the classroom and the workplace.</b>	<b>12-15</b>	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan detailing how and when students will acquire technology skills and information literacy skills.	The plan suggests how students will acquire technology skills, but is not specific enough to determine what action needs to be taken to accomplish the goals.
<b>f. List of goals and an implementation plan that describe how the district will address the appropriate and ethical use of information technology in the classroom so that</b>	<b>15-16</b>	The plan describes or delineates clear goals outlining how students and teachers will learn about the concept, purpose, and significance of the ethical use of information	The plan suggests that students and teachers will be educated in the ethical use of the Internet, but is not specific enough to

<b>students and teachers can distinguish lawful from unlawful uses of copyrighted works, including the following topics: the concept and purpose of both copyright and fair use; distinguishing lawful from unlawful downloading and peer-to-peer file sharing; and avoiding plagiarism</b>		technology including copyright, fair use, plagiarism and the implications of illegal file sharing and/or downloading.	determine what actions will be taken to accomplish the goals.
<b>g. List of goals and an implementation plan that describe how the district will address Internet safety, including how students and teachers will be trained to protect online privacy and avoid online predators.</b>	<b>16-17</b>	The plan describes or delineates clear goals outlining how students and teachers will be educated about Internet safety.	The plan suggests Internet safety education but is not specific enough to determine what actions will be taken to accomplish the goals of educating students and teachers about Internet safety.
<b>h. Description of or goals about the district policy or practices that ensure equitable technology access for all students.</b>	<b>17-18</b>	The plan describes the policy or delineates clear goals and measurable objectives about the policy or practices that ensure equitable technology access for all students. The policy or practices clearly support accomplishing the plan's goals.	The plan does not describe policies or goals that result in equitable technology access for all students. Suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
<b>i. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan to use technology to make student record keeping and assessment more efficient and supportive of teachers' efforts to meet individual student academic needs.</b>	<b>19-20</b>	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for using technology to support the district's student record-keeping and assessment efforts.	The plan suggests how technology will be used, but is not specific enough to know what action needs to be taken to accomplish the goals.
<b>j. List of clear goals, measurable objectives, annual benchmarks, and an</b>	<b>20-23</b>	The plan delineates clear goals, measurable objectives, annual	The plan suggests how technology will be used, but is not

<b>implementation plan to use technology to improve two-way communication between home and school.</b>		benchmarks, and an implementation plan for using technology to improve two-way communication between home and school.	specific enough to know what action needs to be taken to accomplish the goals.
<b>k. Describe the process that will be used to monitor the Curricular Component (Section 3d-3j) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b>	<b>23</b>	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding procedures, roles, and responsibilities.
<b>4. PROFESSIONAL DEVELOPMENT COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 5 and 12 (Appendix D).			
<b>a. Summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development.</b>	<b>24-26</b>	The plan provides a clear summary of the teachers' and administrators' current technology proficiency and integration skills and needs for professional development. The findings are summarized in the plan by discrete skills that include Commission on Teacher Credentialing (CTC) Standard 9 and 16 proficiencies.	Description of current level of staff expertise is too general or relates only to a limited segment of the district's teachers and administrators in the focus areas or does not relate to the focus areas, i.e., only the fourth grade teachers when grades four to eight are the focus grade levels.
<b>b. List of clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing professional development opportunities based on your district needs assessment data (4a) and the Curriculum Component objectives (Sections 3d - 3j) of the plan.</b>	<b>26-33</b>	The plan delineates clear goals, measurable objectives, annual benchmarks, and an implementation plan for providing teachers and administrators with sustained, ongoing professional development necessary to reach the Curriculum Component objectives (sections 3d - 3j) of the plan.	The plan speaks only generally of professional development and is not specific enough to ensure that teachers and administrators will have the necessary training to implement the Curriculum Component.

c. <b>Describe the process that will be used to monitor the Professional Development (Section 4b) goals, objectives, benchmarks, and planned implementation activities including roles and responsibilities.</b>	33	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.
<b>5. INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 6 and 12 (Appendix D).			
a. <b>Describe the existing hardware, Internet access, electronic learning resources, and technical support already in the district that will be used to support the Curriculum and Professional Development Components (Sections 3 &amp; 4) of the plan.</b>	33-51	The plan clearly summarizes the existing technology hardware, electronic learning resources, networking and telecommunication infrastructure, and technical support to support the implementation of the Curriculum and Professional Development Components.	The inventory of equipment is so general that it is difficult to determine what must be acquired to implement the Curriculum and Professional Development Components. The summary of current technical support is missing or lacks sufficient detail.
b. <b>Describe the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support needed by the district's teachers, students, and administrators to support the activities in the Curriculum and Professional Development components of the plan.</b>	51-52	The plan provides a clear summary and list of the technology hardware, electronic learning resources, networking and telecommunications infrastructure, physical plant modifications, and technical support the district will need to support the implementation of the district's Curriculum and Professional Development components.	The plan includes a description or list of hardware, infrastructure, and other technology necessary to implement the plan, but there doesn't seem to be any real relationship between the activities in the Curriculum and Professional Development Components and the listed equipment. Future technical support needs have



			not been addressed or do not relate to the needs of the Curriculum and Professional Development Components.
c. <b>List of clear annual benchmarks and a timeline for obtaining the hardware, infrastructure, learning resources and technical support required to support the other plan components identified in Section 5b.</b>	53-54	The annual benchmarks and timeline are specific and realistic. Teachers and administrators implementing the plan can easily discern what needs to be acquired or repurposed, by whom, and when.	The annual benchmarks and timeline are either absent or so vague that it would be difficult to determine what needs to be acquired or repurposed, by whom, and when.
d. <b>Describe the process that will be used to monitor Section 5b &amp; the annual benchmarks and timeline of activities including roles and responsibilities.</b>	54	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.
6. <b>FUNDING AND BUDGET COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 7 & 13, (Appendix D)			
a. <b>List established and potential funding sources.</b>	54	The plan clearly describes resources that are available or could be obtained to implement the plan.	Resources to implement the plan are not clearly identified or are so general as to be useless.
b. <b>Estimate annual implementation costs for the term of the plan.</b>	55	Cost estimates are reasonable and address the total cost of ownership, including the costs to implement the curricular, professional development, infrastructure, hardware, technical support, and electronic learning resource needs identified in the plan.	Cost estimates are unrealistic, lacking, or are not sufficiently detailed to determine if the total cost of ownership is addressed.
c. <b>Describe the district's replacement policy for obsolete equipment.</b>	55	Plan recognizes that equipment will need to be replaced and outlines a	Replacement policy is either missing or vague. It is not clear

		realistic replacement plan that will support the Curriculum and Professional Development Components.	that the replacement policy could be implemented.
d. <b>Describe the process that will be used to monitor Ed Tech funding, implementation costs and new funding opportunities and to adjust budgets as necessary.</b>	56	The monitoring process, roles, and responsibilities are described in sufficient detail.	The monitoring process either is absent, or lacks detail regarding who is responsible and what is expected.
<b>7. MONITORING AND EVALUATION COMPONENT CRITERIA</b> Corresponding EETT Requirement(s): 11 (Appendix D).			
a. <b>Describe the process for evaluating the plan's overall progress and impact on teaching and learning.</b>	56	The plan describes the process for evaluation using the goals and benchmarks of each component as the indicators of success.	No provision for an evaluation is included in the plan. How success is determined is not defined. The evaluation is defined, but the process to conduct the evaluation is missing.
b. <b>Schedule for evaluating the effect of plan implementation.</b>	56	Evaluation timeline is specific and realistic.	The evaluation timeline is not included or indicates an expectation of unrealistic results that does not support the continued implementation of the plan.
c. <b>Describe the process and frequency of communicating evaluation results to tech plan stakeholders.</b>	57	The plan describes the process and frequency of communicating evaluation results to tech plan stakeholders.	The plan does not provide a process for using the monitoring and evaluation results to improve the plan and/or disseminate the findings.
<b>8. EFFECTIVE COLLABORATIVE STRATEGIES WITH</b>			

<b>ADULT LITERACY PROVIDERS TO MAXIMIZE THE USE OF TECHNOLOGY CRITERION</b> Corresponding EETT Requirement(s): 11 (Appendix D).			
<b>If the district has identified adult literacy providers, describe how the program will be developed in collaboration with them. (If no adult literacy providers are indicated, describe the process used to identify adult literacy providers or potential future outreach efforts.)</b>	57-58	The plan explains how the program will be developed in collaboration with adult literacy providers. Planning included or will include consideration of collaborative strategies and other funding resources to maximize the use of technology. If no adult literacy providers are indicated, the plan describes the process used to identify adult literacy providers or potential future outreach efforts.	There is no evidence that the plan has been, or will be developed in collaboration with adult literacy service providers, to maximize the use of technology.
<b>9. EFFECTIVE, RESEARCHED-BASED METHODS, STRATEGIES, AND CRITERIA</b> Corresponding EETT Requirement(s): 4 and 9 (Appendix D).			
<b>a. Summarize the relevant research and describe how it supports the plan's curricular and professional development goals.</b>	58-61	The plan describes the relevant research behind the plan's design for strategies and/or methods selected.	The description of the research behind the plan's design for strategies and/or methods selected is unclear or missing.
<b>b. Describe the district's plans to use technology to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance-learning technologies.</b>	62	The plan describes the process the district will use to extend or supplement the district's curriculum with rigorous academic courses and curricula, including distance learning opportunities (particularly in areas that would not otherwise have access to such courses or curricula	There is no plan to use technology to extend or supplement the district's curriculum offerings.

		due to geographical distances or insufficient resources).	
--	--	---	--